Oil
as an International
Problem.

Ogawa

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OIL,

AS AN INTERNATIONAL PROBLEM.

By: Shigetomi Ogawa

May, 1926.

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CHAPTER I.

OCCURRENCE, ORIGIN, AND HISTORY.

I. OCCURRENCE.

"Oil is found naturally in different forms. Sometimes it occurs as a volatile liquid at ordinary temperature; it is then known as naphtha. Sometimes the volatile principles are only given off at higher temperatures; it is then called petroleum or rock-oil. Sometimes also it appears in a semi-solid form, asphalt, its volatile properties having already evaporated."[a]

"It is very rarely that oil is found on the surface or gushing up by itself without the help of the pumps."[b] It is usually met with at a great depth underground and the depth of wells to reach pockets, in which oil is found, varies from 200 to 1,600 meters, according to the region.

"Usually, an oil pool is a body of convex shape like an inverted basin, lying under the crest or dome of an impervious layer of rock. Normally the order of occurrence is gas just below the crest, then oil, and finally water buoying up the oil with its support from below. Where water is lacking as in portions of the Appalachians, the oil tends to accumulate in the structural synclines rather than under the dome or antichines."[c]

In an examination of the chemical composition of oil, a hydrocarbon, in which the carbon, in a proportion of 80 to 88 per cent,

is combined with hydrogen, and sometimes with a little oxygen, reveals in this compound a marvelous source of thermal energy, which may manifest itself in various ways. For, from the greenish-brown oil which is lighter than water, no less than 123 chemical compounds are obtained, which are used in forty different industries.

According to Mabery,[1] petroleum is composed of a varying mixture of five major series of hydrocarbons, each with a distinctive relationship between the number of carbon and hydrogen atoms present. These are:

"I. The paraffin series, C_nH_{2n+2}, comprising the main portions of gasoline, kerosene, and wax of commerce;

II. The naphthene series, C_nH_{2n}, a closed chain, or cycle, type of hydrocarbon, especially characteristic of petroleum yielding asphaltic residues upon distillation;

III. A series of the formula C_nH_{2n-2}, represented particularly in the lighter petroleums, having some viscosity and forming lubricating distillates of light to medium body;

IV. A series of the formula C_nH_{2n-4}, typical of the asphaltic petroleums and forming the constituents of the best lubricants it is possible to prepare from petroleum; and

V. The aromatic series, C_nH_{2n-6}, cyclic in character like the naphthenes and regarded as a detriment to be removed in refining."[d]

"In practice the various types of petroleum are regarded as falling into three classes: the paraffin-base petroleums, especially rich in the hydrocarbons of the C_nH_{2n+2} and C_nH_{2n-2} series; the asphalt-base, or more properly the naphthene-base, petroleum, consisting mainly of the hydrocarbons of the C_nH_{2n}, C_nH_{2n-2}, and to some degree of the C_nH_{2n-6} series; and intermediate types."[e]

"The paraffin-base crudes are rich in gasoline and wax, and yield the bulk of the lubricants produced; the asphalt-base crudes are low in gasoline, yielding for the most part notable percentages of asphalt, and although rich in viscous hydrocarbons are not so extensively employed in the manufacture of lubricants; the intermediate, or mixed-base petroleums share the characteristics of the other two. As may be readily inferred from the carbonhydrogen ratio, the paraffin petroleums are lighter in weight and more fluid than the asphaltic petroleums."[e]

2. ORIGIN.

"The question of the origin of petroleum, though for the first half of the nineteenth century of little more than academic interest, has engaged the attention of naturalists and others for over a hundred years. As early as 1804, Humboldt expressed the opinion that petroleum was produced by distillation from deep-seated strata, and Karl Reichenbach, in 1834, suggested that it was derived from the action of heat on the turpentine of pine trees, while Brunet, in 1838, on the ground of certain laboratory experiments, also suggested a similar theory of origin."[f]

"Although M. P. E. Berthelot announced, in 1866, that mineral oil was produced by purely chemical actions, an overwhelming and increasing majority of those who have studied the natural conditions under which petroleum occurs are of the opinion that it is of organic origin. Among those, some have considered that it is derived from the decomposition of both animal and vegetable marine organisms. Others hold that the process has taken place at a high temperature and under great pressure."[g]

Consideration of the evidence leads us to the conclusion that, at least in commercially valuable deposits, mineral oil has generally been formed by the decomposition of marine organisms, in some cases, animal, in others vegetable, and in others both, under practically normal conditions of temperature and pressure.

III. HISTORY.

Although the intensive use of oil and its industrial applications are of comparatively recent date, the discovery of deposits of petroleum goes back to remote antiquity. The history of oil is as old as the world, since there is already mention of it in the Book of Genesis. The wells of Baku were known long before the Christian era in the peninsula of Apsheron, where also arose the cult of Zoroaster and the fire worshippers.

"The Greeks and Romans were acquainted with oil."[h] "In ancient mythology and literature oil is often mentioned. It is probably with oil that the Centaur - to avenge himself upon Hercules - was obliged to anoint the famous shirt of Nessus."[i] "Herodotus, in his works, mentions the oil fields of Zante; Pliny those of Agrigento in Sicily;

Plutarch those of Ecbatana and Babylon."[j]

"The ancient records of China and Japan are said to contain many allusions to the use of natural gas for lighting and heating. Petroleum, "burning water", was known in Japan in the seventh century."[k] "Marco Polo refers to the oil springs of Baku towards the end of the thirteenth century. Europeans have used oil for lighting since the fourteenth century."[k] About 1840 France made the first trial use of shale oil, and Germany in 1833 invented the oil lamp.

"The earliest mention of American petroleum occurs in Sir Walter Raleigh's account of the Trinidad pitch-lake in 1595. Thirty seven years later, Sagard's Histoire du Canada, telling about the oil springs of New York, was published. A Russian traveler, Peter Kalm, in his work on America, published in 1748, showed on a map the oil springs of Pennsylvania, and about the same time Raicevich referred to the "liquid bitumen" of Rumania."[l]

"But it was only in the middle of the nineteenth century that the real importance of the oil fields scattered over the globe began to be realized."[m]

....

a. De La Tramery, The World Struggles For Oil, p.2I.

b. De La Tramery, The World Struggles For Oil, p.2I.

c. Pogue, J.E., The Economics of Petroleum, p.I3.

d. Pogue, J.E., The Economics of Petroleum, p.I2.

e. Pogue, J.E.? The Economics of Petroleum, p.I2.

f. Encyclopedia Britanica on "Petroleum".

g. Encyclopedia Britanica on "Petroleum".

H. De La Tramery, The World Struggles For Oil, p.24.

i, De La Tramery, The World Struggles For Oil, p.25.

j. De La Tramery, The World Struggles For Oil, p.25.

k, l, and m. Encyclopedia Britanica on "Petroleum".

I. Composition of Petroleum and Its Relation to Industrial Use. American Institute and Metallurgical Engineers, Publ. No.I58, February, I920.

Occurence.

This section is prepared especially by using following sources:
De La Tramery, The World Struggles For Oil. Chap. II.
Pogue, J. E., The Economics of Petroleum.

Origin.

Prepared by using following sources:
Encyclopedia Britanica on Petroleum.
Pogue, J.E., The Economics of Petroleum.

History.

Sources used are as follows:
Encyclopedia Britanica on Petroleum.
De La Tramery, The World Struggles For Oil. Chap. II.

CHAPTER II.

THE UTILIZATION OF PETROLEUM.

Before going further, it will be well to consider the various ways in which petroleum is utilized in the industry and commerce of the world. According to Edwin C. Eckel's classification, [1] these fall into four groups:

> "First, petroleum or heavy products are used directly as fuel under boilers, in place of coal.
>
> Second, gasoline or some other petroleum derivative may be used as a fuel for internal combustion engines.
>
> Third, kerosene and some other petroleum derivatives are used largely for illuminating purposes.
>
> Fourth, petroleum is used as a basis of raw chemical products."

"If we look over this classification, we will see immediately that the question of how far petroleum will replace coal, or compete with it"[a] is a pertinent one. "It was not so many years ago that coal was regarded as indispensable to our existence. This situation prevails no longer. The world could get along very comfortably without coal; but if the oil resources of the world were exhausted, the whole advance of civilization would be retarded."[b] "One would not be far

---

[1] Edwin C. Eckel: Coal, Iron and War, Chap. 10.

wrong if one expressed the opinion that the community today eats, drinks, and sleeps -- in fact, exists -- upon petroleum."[2] An immense amount of power is derived from petroleum directly or indirectly; over 200 different products are derived therefrom, each of which commands a distinct marketable value; and it is still used for illuminating purposes, which is as old as its discovery.

It is not the writer's aim in this paper to make an elaborate study along "the utilization of petroleum", but it constitutes the basis of the problem, "the struggle for oil". It is, therefore, essential to keep it in mind whenever we study the nations' policies and struggles for oil. From this point of view, the writer has made his investigation and his own classification as follows:

First: Illuminating purposes.
  Lamps and wax candles
  a. humble glimmer in the bedroom.
  b. brilliant penetrating beam cast from a light house.

Second: For raw chemical products.
  a. solvent.
  b. manufacture of oilcloths.
  c. chemical laboratory.
  d. laundry.
  e. substitute for cheap grades of turpentine
    in the dyeing and painting industry.
  f. wax for textile industry.
  g. bitumen: manufacture of cables.
  h. pitch: as in road making.

Third: As fuel.
  1. For heat.
    a. stoves and heater.

  2. For power.
    a. directly under the boiler

b. Internal combustion.
light oil -- motors.
heavy oil -- for Diesel engine.

It is quite obvious that petroleum is especially important and valuable for generating power. None of us will fail to see the importance of "power" in the modern industrial world, and it cannot be too greatly exaggerated. We will discuss this more in detail later.

CONSUMPTION.

Before leaving this topic, however, it is rather interesting for us to notice how petroleum consumption is increasing your by year according to the following table:

(The consumption of the U.S. is substituted for that of the world at large; because of the lack of the latter).

Consumption of Petroleum in the U.S.A.
(Monthly average)

Year	Crude Oil	Gasoline	Kerosene Oil
1913	21,000 [a]	.....	....
1914	21,774	.....	....
1915	22,772	.....	....
1916	26,549	..... [b]	....
1917	31,478	211,420	.... [b]
1918	34,429	200,772	120,546
1919	34,874	266,234	116,158
1920	43,732	354,225	115,789
1921	43,748	376,336	103,378
1922	49,370	447,674	121,991
1923	59,526	548,611	124,908
1924	62,486	647,520	128,738
1925	......	780,175	141,240

Year	By Vessels	By electric power plants	By railroads
1913	......	......	......
1914	......	......	......
1915	......	......	......
1916	...... [b]	......	......
1917	20,664	......	......
1918	23,664	...... [b]	......
1919	49,098	38,675	......
1920	92,664	45,929	...... [b]
1921	94,752	42,052	118,915
1922	110,922	46,177	190,508
1923	131,754	51,397	164,989
1924	151,634	58,490	174,970
1925	149,664	35,890	....

a. thousands of barrels.
b. thousands of gallons.

From "Survey of Current Business" of United States Department of Commerce. February, 1926, No. 54.

Our consumption in 1975? "An interesting estimate was made by Dr. K. G. Mackenzie, chemist for the Texas Company, who presented an elaborate table of the future gasoline demand in the United States before the Chemical Society, at the Chemists' Club, New York, in September, 1925.[3] The maximum gasoline demanded, according to his figures, would rise from 218,215,000 barrels of forty-two gallons each in 1925 to 547,156,000 in 1975.

The total number of automotive engines in this country in 1925 was given as 21,381,000: the number of passenger automobiles as 18,400,000: motor trucks as 2,500,000; and aeroplanes, motorcycles, and motor boats as 481,000.

In 1975, according to estimates of future conditions, these numbers will have increased as follows: Automotive engines, 5[illegible],000: passenger automobiles, 43,913,000: motor trucks, [illegible],000: aeroplanes, motorcycles, and motor boats, 2,647,000."[c]

There is believed to be no immediate danger of exhaustion of crude petroleum in the United States, with resulting cessation in the production of gasoline, according to Mr. Mackenzie. "There are, moreover, enormous reserves elsewhere in the world, part of which, at least, will be available for our use," was his opinion as to the future oil supply.

References:-

1. Edwin C. Eckel: Coal, Iron and War. Chap. 10.
2. Talbot, F.A.: The Oil Conquest of the World. Chap. 11.
3. Petroleum Age, Vol. 16, No. 9. Nov. 1, 1925.

Other references:

Pogue, J. E.: The Economics of Petroleum.
New York, John Wiley & Sons, Inc., 1921.

Eckel; E. C.: Coal, Iron and War.

Talbot, F. A.: The Oil Conquest of the World.

a. Eckel, Edwin C., Coal, Iron and War. p.I23.

b. Pogue, J.E., The Economics of Petroleum.

c. Practically from "Petroleum Age", Nov. I, I925. p.22.

CHAPTER III.

THE CHIEF SOURCES OF PETROLEUM SUPPLY.

"There is oil in all parts of the world, and yet"[a] its distribution is not as general as the other various natural resources in the earth. Probably, it is one of the reasons why there is such a struggle among the nations for petroleum.

1. From Alaska almost to Tierra del Fuego, every country in the New World possesses some.

Alaska, (Peninsula, Controller Bay)
Canada, (Alberta): its presence was discovered in 1789
by Sir Alexander Mackenzie.
United States, (California, Rocky Mountains, Illinois,
Ontario, New Brunswick, Appalachian
Mountains, Louisiana, Indiana, Mid-Continent,
Gulf).

Mexico.

Central America.

Venezuela.

Trinidad, Guiana.

Colombia.

Ecuador, Peru, Bolivia.

Chile, the Argentine.

Brazil and Uruguay: it is hoped that oil will be found shortly.

2. In Europe, it is less evenly distributed.

Hanover (Wenigsen).

Galicia.

Alsace.

Poland, The Ukraine, Rumania.

Hungary: A subsidiary company of the Anglo-Persian, the

D'Arcy Exploration, found oil deposits in March, 1921.

3. Asia is nearly as rich as America.

The Caucasus, (Baku, Grosny, Taman-Kertch).

Persia, Mesopotamia.

Dutch Indies.

Siam, Burma.

China, (Shensi, Szechwan, Assam)

Japan and Formosa

Larabt, (Russian)

4. "Africa and Oceania, on the contrary, seem to possess only small quantities of the precious oil. There is some in North Africa, in Egypt, and Madagascar. The great British prospecting group was making a thorough search during 1920-21 in Western Australia and New Zealand."[b]

"Now nearly all these oil fields, scattered in the four corners of the world, and in so many different countries, are at the present moment in the hands of two great trusts -- one American, "The Standard Oil Company", and the other Anglo-Dutch, the "Royal Dutch Shell"-- and certain companies controlled by the British Government."[e]

WORLD PRODUCTION OF PETROLEUM.

The world's output during the last three years (1923, 1924,

and 1925) can be considered at a uniform average rate of slightly over 1,000,000,000 barrels per year. The outstanding feature responsible for the increase can be accounted for by the increased production in the United States, with an average daily yield in the past three years slightly in excess of 2,000,000 barrels; the total production outside the United States has been practically stationary.

The following table shows the production of the various countries during the last sixteen years. The figures for 1910-1924 are those of the United States Geological Survey, while the 1925 figures are the estimates made by Valentin R. Garfias, manager of foreign oil department of Henry L. Doherty and Company.

World Petroleum Production.

Year	U.S.A.	Mexico	Russia
1910	209,557,248	3,634,080	70,336,574
1911	220,449,391	12,552,798	66,183,691
1912	222,935,044	16,558,215	68,019,208
1913	248,446,230	25,696,291	62,834,356
1914	265,762,535	26,235,403	67,020,522
1915	281,104,104	32,910,508	68,548,062
1916	300,767,158	40,545,712	72,801,110 a
1917	335,315,601	55,292,770	69,000,000 b
1918	355,927,716	63,828,327	40,456,182
1919	377,719,000	87,072,954	34,284,000
1920*	443,402,000	159,000,000	30,000,000
....			
1923	732,407,000	149,585,000	39,156,000
1924	713,940,000	139,497,000	45,312,000
1925*	755,000,000	113,000,000	55,000,000
1857-1920	5,429,692,719	532,055,443	937,323,199
Oil Reserve under the ground	7,000,000,000	4,525,000,000	5,830,000,000
Ratio	100	65	83

Year	Holland's India	India	Rumania	Galicia
1910	11,030,620	6,139,990	9,723,806	12,673,688
1911	12,172,949	6,451,203	11,107,450	10,519,270
1912	10,845,624	7,116,672	12,976,232	8,535,174
1913	11,172,294	7,930,149	13,554,676	7,818,130
1914	11,824,802 c	7,409,792	12,826,579	5,033,350 b
1915	12,385,800 c	8,202,674	12,029,913	4,158,899
1916	13,174,399 c	8,491,137	10,298,208 a	6,461,706
1917	12,928,955 c	8,078,849	2,681,870 b	5,965,447 a
1918	13,284,936 c	8,000,000 b	8,730,235	5,591,620
1919	15,780,000	8,453,000	6,715,748	6,255,000
1920	16,000,000	8,500,000	7,406,313	6,000,000
1923	19,160,000	8,320,000	10,867,000	...
1924	20,473,000	8,150,000	13,303,000	...
1925	22,000,000	8,000,000	15,000,000	...
1857-1920	220,168,518	123,115,365	165,530,477	166,396,273
Reserve	3,015,000,000	995,000,000	1,135,000,000	
Ratio	43	14	16	

Year	Persia Mesopotamia	Northern Part of South America Peru	Trinidad	Venezuela
1910	...	1,330,105	142,857	.....
1911	...	1,368,274	285,307	.....
1912	...	1,751,143	436,805	.....
1913	...	2,133,261	503,616	.....
1914	...	1,917,802	643,539	.....
1915	...	2,487,251	700,000 b	.....
1916	...	2,550,645	928,581	.....
1917	6,856,068	2,533,417	1,599,455	127,743
1918	7,200,000	2,536,102 c	2,082,068	190,080
1919*	6,189,812	2,561,000	2,780,000	321,000
1920*	6,604,734	2,790,000	2,790,000	500,000
....				
1923	28,793,000	5,699,000	3,051,000	4,059,000
1924	32,373,000	7,812,000	4,057,000	8,754,000
1925*	35,000,000	11,000,000	4,600,000	19,000,000
1857-1920	26,990,609	29,765,367	11,781,022	1,138,823
Reserve	5,820,000,000		5,730,000,000	
Ratio	83		82	

Year	Japan	Southern Part of South America Argentina	Others	Egypt	France
1910	1,930,661	20,753	...	...	...
1911	1,658,909	13,119	...	9,150	...
1912	1,671,405	47,007	...	205,905	...
1913	1,942,009	130,018	...	94,695	...
1914	2,738,378	275,500	...	777,038	...
1915	3,118,464	516,120	...	262,208	...
1916	2,997,178	796,920	...	411,000	...
1917	2,898,654	1,144,737	...	1,008,750	...
1918	2,449,069	1,321,315	...	2,079,750	...
1919	2,120,000	1,504,300	...	1,662,184	...
1920	2,213,063	1,366,926	...	1,089,213	700,000
....					
1923	1,789,000	3,400,000	...	1,054,000	463,000
1924	1,556,000	4,269,000	...	1,122,000	426,000
1925	2,000,000	5,000,000	...	1,200,000	500,000
1857-1920	42,831,330	7,167,319	...	7,599,633	700,000
Reserve	1,235,000,000	3,550,000,000		925,000,000	d(excluded Alsace)
Ratio	18	51		13	(included in Rumania and Galicia)

Year	Canada	Germany	Italy	Others	Total
1910	315,895	1,032,522	50,830	20,000	327,937,629
1911	291,096	1,017,045	74,709	20,000	344,174,355
1912	243,336	1,031,050	53,778	20,000	352,446,598
1913	228,080	995,764 b	47,198	20,000	383,547,399
1914	214,805	995,764 b	39,849	20,000	403,745,342
1915	215,464	995,764 b	43,898	10,000	427,740,129
1916	198,123	995,764 b	50,535	25,000	462,493,226
1917	205,332	995,764 b	50,334 b	21,000 e	506,702,902
1918	304,741	711,260	35,334	...	514,729,354
1919	320,000	925,000	38,254	2,048,000 f	556,764,252
1920*	220,000	215,000	38,000	25,000 b	688,473,587
....					
1923	170,000	312,000	34,000	109,000	
1924	164,000	406,000	45,000	109,000	
1925*	165,000	460,000	50,000	109,000	
1857-1920	24,265,770	17,804,121	1,048,925	2,489,172	8,743,334,300
Reserve	995,000,000	(included in Rumania)	(included in Rumania and Galicia)	925,000,000 g 1,375,000,000 h	43,055,000,000
Ratio	14			33	615

1910-1918:
1918-1857:
According to U.S.Geo. Survey.
1919-1920:
According to U.S. Geo. Association
1923-25:
According to U.S. Geo. Survey, requoted from Petroleum Age, Oct. 15, 1925.

Oil reserve under the ground:
(according to Mr. E. Etehnger's estimation)

a. Partley estimated.
b. Estimates.
c. Included Borneo.
d. Included Argalia.
e. Included 19,167 of Cuba.
f. Included Western Europe.
g. Included Northern Russia and Karaht.
h. China.
i. Scotland.
j. Amount brought to markets.

Unit: barrel; Crude Oil.

FUTURE SUPPLY OF PETROLEUM.

Discussing the future supply of petroleum, E.C. Eckel said,[1] "When considering the growth of petroleum output, the United States has been the world's chief source of petroleum from the commencement of the industry. That condition, however, will not continue, always, and we have some reason for thinking that it is even now close to its end." There are various estimations of the oil reserves in the United States. One of them was that of Mr. Ralph Arnold at the close of 1916 and according to him, the oil remaining in the ground in the United States may amount to some 4,000 million barrels. Another estimation, which was made later by Dr. David White, would place the unused reserve at the same date, at less than 6,000 million barrels.

"Accepting the larger estimate," said Eckel, "our (the U.S.A.) unused petroleum will last some fifteen years at the current rate of petroleum production, or far less than ten years, if the production should increase as it has done in recent years."

Against such a pessimistic estimation, the American Petroleum Institute Committee made public its optimistic report to the Oil Conservation Board last year.[2]

It is a 300 page report prepared after a country-wide and prolonged survey by many operators and by experts, and scientists within and without the industry. High spots in the committee report, are:

1."There is no imminent danger of the exhaustion of the petroleum reserves of the United States."

2."It is reasonable to assume that a sufficient supply of oil will be available for national defense and for essential use in the United States beyond the time when science will limit the demand by developing more efficient use of, or substitutes for, oil, or will displace its use as a source of power by harnessing a natural energy."

3."Petroleum recoverable by present methods of flowing and pumping from existing wells and acreage thus proven consist of five billion, three hundred million (5,300,000,000) barrels of crude oil."

4."It is estimated that after pumping and flowing there will remain in the area now producing and proved twenty-six billion (26,000,000,000) barrels of crude oil, a considerable portion of which can be recovered by improved and known process such as flowing with water, the introduction of air and gas pressure and mining, when price justifies."

5."Improved methods of deep drilling below oil sands now producing will disclose in many areas deposits not hitherto available, which will be tantamount to the discovery of new fields. The limit of deep drilling has not been reached."

6."The major oil reserves of the United States lie in some one billion, one hundred million (1,100,000,000) acres of lands underlain by sedimentary rocks, and not fully explored, in which geology indicates oil is possible. With extended search new supplies will be found therein."

7."The nation has an additional reserve in the vast deposit of

oil shale, coal and lignites from all of which liquid fuel and lubricants may be extracted."

The same American Petroleum Institute reports, however, that the daily average production of crude oil in the United States dropped 4,500 barrels in the week of December 5, 1925.[3] Daily average output for the week was 2,040,750 barrels against 2,045,250 barrels in the previous week, and 1,974,500 barrels in the corresponding week last year (1924). Sharp declines in production were reported in Oklahoma, Kansas and California.

For the future oil supply of the world, we shall probably have to look to Asia, and particularly to the areas in eastern Turkey, in Persia, and in China. The bulk of the world's probable petroleum reserve is supposed to lie in the southwestern part of Asia, and the southeastern European region. Discovery of oil in the Artic slope of Alaska was reported by Gerald Fitzgerald, head of the United States Geological Survey party, in the summer of 1925.[4] We have, therefore, a comparatively sufficient oil supply and it seems there is no reason to worry about the shortage of the supply for sometime.

We have seen the world petroleum production over a number of years and the estimates of the world's reserve, which were prepared mainly by the United States Geological Survey. Undoubtedly the estimations are but general approximations, but at least they have sufficient substance to show where the leading centers of oil production are likely to be in future; and with due qualifications they must be given consideration in matters involving the industrial and international policy of the nations on which our attention will be centered.

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a. De La Tramerye, The Wrole Struggles For Oil, p.40.

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c. De La Tramerye, The World Struggles For Oil, p.42.

CHAPTER IV.

WHY THE STRUGGLE FOR OIL?

One of the most interesting estimates was made by E. C. Eckel[1] as to the increased mechanical power in the world. According to his estimation, "the entire world of 1770 may have had some five hundred millions of population, or roughly one third as many as it is supposed to have today. The power available for work" a has increased in a far greater ratio, however. "In 1770 the total power available was that of human beings and draft animals, plus a (little) few small water power, plus of course a fraction of wind power developed by windmills and sailing vessels. If we assume that two-thirds of the world's population was capable of useful work, and if we make some still cruder assumptions as to the animals ~~or~~ mills and vessels then ~~then~~ in existence, we come to some such figure as eighty million horsepower as being the absolute maximum possibly available at that time. Today (1920) the steam and hydro-electric power utilized in the world must aggregate around one hundred and sixty million horse power, so that our mechanical power alone is almost double the total world power which could be developed in 1770."

No one will fail to see the great significance of mechanical power in the modern industrial world; and no one can estimate its importance as such. The new power placed at our disposal has certain features of interest, aside from its total quantity. It can be utilized in large units. Many mechanical achievements are now easy enough which two or three centuries ago would have been entirely impossible. Thus, wonderful modern transportation facilities by sea, land, and air have sprung up like the story of

Aladdin's lamp. It is no wonder one says, "this is the age of power", for it will lead us very naturally to the next conception that the fundamental basis upon which the industrial life of modern nations rests is fuel from which power is derived.

The completion of the steam engine by Watt in 1769 introduced a great epoch in the world. The water-turbine in 1827, and the invention of the dynamo in 1831, were momentous inventions. The Otto gas-engine came in 1867, and the high speed oil engine in 1883. From steam power to electric power; from boiler to internal combustion--these were developments in the methods of generating power that the world saw during the last two centuries.

The significant importance of power in modern industry and these successive technological inventions were fated to alter the relations between nations and to threaten the stability of empires. Oil, as an international problem, at present, therefore, is nothing but the product of new technicological inventions. The writer will try to examine the problem more closely from now on.

2. OIL: AS A FUEL.

For half a century, oil was simply a means of lighting: its use was confined to the lamp, and occasionally the domestic stove: and at one time there was some thought of restricting its production. "Between 1900 and 1910, the perfecting of the internal combustion engine and enormous development of motoring gave it a new consumption."[2] These new engines consumed petrol alone, and when a German, named Diesel constructed the first internal combustion engine for heavy oil, another

step was added to its importance as an international problem.

Nevertheless, in spite of numerous improvements, the internal combustion engine enjoyed only a comparatively modest success, and the great liners made no use of this invention. Then came the idea of introducing the mazut directly into the furnaces of great ships. By means of some supplementary inexpensive installations and small alterations in detail, ships of any size can now be converted into oil burning vessels in a short time and at small cost.

The advantages of such conversion are enormous:

1. For the same weight fuel oil gives 70 per cent more heat than coal.

2. The efficiency of a boiler heated by oil is greater than by coal. "The efficiency of a boiler heated by coal is not much more than 60 per cent; that heated by oil reaches 80 per cent. On Japanese steamers of the type of the Tenyo Maru, of 21,000 tons, with Parson's turbine of 20,000 horsepower, the consumption of oil is only 455 grammes to one effective horsepower, instead of 665 grammes of coal."[c]

3. It is less bulky.

4. It is stored in the double bottom of the boat, and by utilizing the coal bunkers for general cargo the available storage space is increased by 10 per cent; sometimes as much as 33½ per cent. (in the case of Cunard & White Star Liners).

5. It is not dearer.

6. It is easily manipulated, for it flows by itself into the machine.

7. It economizes labor considerably, in loading a ship and boiler room.

8. Hundreds of tons of oil can be pumped into the cisterns in a negligible time, and that even out at sea and in heavy weather.

9. It permits more rapid variations in speed.

10. It is cleaner. There is no longer either dust or smoke.

The following little table, given by De La Tremerye[3] made out for two boats of the same power, will give an idea of the great advantages of the Diesel engine:

	Diesel	Steam
H.P.	21,000	21,000
Weight of engine & accessories	1,000 tons	3,400 tons
Space required	5,300 cu.m.	10,000 cu. m.
Daily consumption	100 tons(heavy oil)	360 tons(coal)
Consumption for a voyage of 15 days	1,500 tons	5,400 tons
Bunker space for a voyage of 15 days	1,700 cu. m.	7,000 cu. m.
Total space required for engine & fuel	7,000 cu. m.	17,000 cu. m.

To give an idea of the difference in time and labor required for the loading of coal and oil before the sailing of a mail steamer of the tonnage of the Olympic or the Lusitania, De La Tremerye,[4] gives an interesting figure:

Coal.......3 days......500 men.
Oil........12 hours.... 12 men.

Such advantages in using oil as fuel for marine purposes had not only a significant influence upon ocean transportation, but also affected armoured vessels. Let us see De La Tremerye's picture-like description by which he powerfully demonstrated how and why oil is important as fuel in modern strategy of the Navy.[5]

"The presence of a squadron sailing under coal is discovered at a distance of more than 10 kilometers by enormous clouds of smoke; under oil its presence is almost imperceptible; it becomes visible only at the moment when it is about to attack. Ease of approach is enormously increased. 'No smoke, not even a funnel!' exclaimed Lord Fisher, in his strenuous campaign for the transformation of the British Navy. Moreover, with oil fuel

fleets require an extreme mobility. In fact, at the battle of Jutland, only the oil burning ships realized their trial speed. Half an hour after receiving the order to raise steam the ship is ready to start. Thirty minutes afterwards it is going at full speed. In six minutes it can pass from normal to maximum speed. Eleven minutes are needed to get a boiler under full pressure. A voyage at forced speed entails no extra fatigue for the crew: with coal it is hell!"

Giving out more heat for a smaller volume and also allowing a saving of 30 per cent in bunker space, it increases the radius of action about 50 per cent. to the squadron. Therefore, by using oil, modern Armada are able to stay one half longer on high sea than those using coal. By reducing bunker space, armoured vessels can be armed with more powerful guns.

Thus, since 1912, oil has been constantly used on twenty-eight German battleships, and on almost all of those of Great Britain, and the naval authorities of the United States have completely given up the use of coal in the new capital ships under construction. In fact, nearly half of all the power used by the British Navy in the World War was derived from petroleum, and the fleet steamed 7,000,000 miles a month.[6]

It is essential to have control over fuel in time of peace for economic prosperity, and in time of war to supply the navy and maintain control of the seas, so as to be a powerful nation. The Great Powers, therefore, at present, all have an "oil policy" and it becomes one of the most vital questions in and among all the nations.

After the foregoing investigations, we are now ready to hear enthusiastic Henry Berenger, in a diplomatic note which he sent to Clemenceau on December 12, 1919, on the eve of the Franco-British conferences held in London to consider the future Eastern Europe and Asia Minor. "Who has oil has Empire! Control of the ocean by heavy oil, control of the air by highly refined oils, and of the land by petrol and illuminating oils. Empire of the World through the financial power attaching to a substance more precious, more penetrating, more influential in the World than gold itself!"[7]

In succeeding chapters, let us examine each nation's policy in turn.

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3. " " p. 16.
4. " " p. 17.
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6. Parsons, Floyd W.: Petroleum and Prosperity, p. 16.
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CHAPTER V.

THE OIL POLICY OF GREAT BRITAIN.

1. THE BRITISH EMPIRE IN DANGER.

It is generally known "that British naval supremacy is the essential condition of the existence of the British Empire. Now, she owes this not only to the number and tonnage of her ships, but still more to her control of fuel. Thanks to the innumerable coaling stations which she has established and with which she supplies all the world's trades, neither warship nor merchantman can cross the ocean without her permission."[a]

But from the moment when it became possible to use oil fuel for ships, everything has changed. The British do not produce oil. The United States provides almost 80 per cent of the world's consumption. Were they, then, going to take upon themselves the part of compulsory purveyor to all the fleets of the world?

"Then came the War."[b] "For six years the British waged an exhausting war, with the main object of ruining German shipping forever. At the cost of enormous sacrifices, which will weigh upon her for half a century, she gained her end."[c] "Yet now, from the very war which destroyed that competitor, a new one has arisen, twice as formidable as the old, for, in addition to a superiority in tonnage, it enjoys the practical monopoly of a fuel of which the British have none."[d]

Thus, the supply of oil becomes one of the most vital problems to British existence. This situation was noticed by the nation a long time

ago and especially by Lord Fisher, who studied the oil policy so intensely that he was called an "oil maniac" by his countrymen who did not know the importance of oil.

2. GENERAL OIL POLICY:

Lord Fisher was a pioneer of the British oil policy. He observed the importance of oil as fuel for battleships and sensed the necessity of an invention like the Diesel engine. When he entered into the office of Chief of the Naval General Staff in 1904, for the first time, the British oil policy was established. According to him, oil should be bought at low prices and accumulated during the time of peace, and then used at a time of emergency.[1] Although he believed it was essential to control the oil supply for the British Navy, so as to maintain its dominance, he never thought of the oil industry as necessarily a Government enterprise.

The new oil policy in Britain, however, was established in 1912. Secretary of Navy, Churchil, visited the Zeelandia, an oil ship of Denmark in the same year, when she called at London on the way home from the East Indian cruise. He recognized the importance of oil as fuel through this visit and later endeavored to establish the new oil policy.

It is remarkable to notice that even before the War, at a time when no one was yet thinking of it, that they had a clear vision of the serious consequences which the new use of oil fuel would entail upon the balance of power and thedestinies of their country. All were

aware, by a long-standing tradition, that the British Empire was founded upon its deposit of coal. From the moment when another fuel threatened to supplant coal, they sought to obtain over oil the same supremacy they already had over coal.

The task, it must be admitted, seemed extraordinarily difficult. Nature had given the British coal in such abundance and had placed it everywhere so close to the sea, that one might almost say it had put all the shipping of the world in the hands of the British coal merchant; but it had denied her oil. The total oil production of the whole of Britain is only 2.5% of the total production of the world. So that an agressive policy is the only one left for Britain if she would maintain her supremacy on the waters.

From this time on, the British oil policy changed to the extremely positive from an attitude of non-interference. Her policy is now protective, that is, the amalgamation of non-interference and Government enterprise; by which it is intended to bring oil resources abroad under her control; to exclude all foreigners from her home oil industry; to reserve her preferential rights to the oil supply; and to use her own capital for these oil industries in various parts of the world.[2]

Briefly stated, her oil policy is as follows:-

"1. By debarring foreigners and foreign nationals from owning or operating oil producing properties in the British Isles, colonies and protectorates.

2. By direct participation in ownership and control of petroleum companies.

3. By arrangements to prevent British oil companies from selling their properties to foreign owned or controlled companies.

4. By orders in council that prohibit the transfer of shares in British oil companies to other than British subjects or nationals.

This general policy is accentuated by drastic specific laws relating to mining and petroleum prospecting in Australia, British East Africa, British West Africa, India, and other portions of the British possessions."[e] In Canada, however, the general British policy as to petroleum rights has not been reflected in the specific regulations enacted in other portions of the British Empire. But on March 1,,1920, the Canadian order in the Council made effective the following regulation:

"Any company acquiring by assignment or otherwise a lease under the provisions of these regulations shall be a company registered or licensed in Canada and having its principal place of business within His Majesty's dominion."

3. BRITISH OIL COMPANIES:[f]

Although it sometimes happens that Governments oppose each other openly in the struggle for oil, as in the case of Poland, Rumania, the Caucasus, and Turkey, they prefer, in general, to hide behind trusts. Before we go further, therefore, it is rather convenient to familiarize ourselves with the names of companies, through which the British Government's policy is reflected.

1. The Shell Transport.

This was originally a small company which traded in mother of pearl in distant seas. As a side line, it worked up an interest in certain oil undertakings in Egypt and in the Straits of Malacca. Thanks to the support of the Rothschilds it flourished like a green bay tree. Its

prospectors secured India, Ceylon, the Malay States, Northern China, Siam. Important concessions were acquired in the Dutch East India, in the Caucasus, and in Rumania. Insensibly, the Shell Transport stretched its tentacles over every quarter of the Old World.

2. The Royal Dutch Company. The Royal Dutch-Shell Company.

It was in 1890, at the Hague, the Royal Dutch Oil Company was founded, with a capital of 1,300,000 florins. As a result of boring carried out in the Sunda Islands, the Government of the Dutch India granted it concessions at Sumatra.

The capital was increased to 1,700,000 florins in 1892. It acquired new concessions, when more profitable explorations allowed a first dividend in 1894 of 8 per cent. This restored the confidence of the public, and the Royal Dutch was able to increase its capital without difficulties in 1895 to 2,300,000 florins. In 1897, its capital increased to 5,000,000 florins and the dividends had risen to 52 per cent. By competition with the Standard Oil Company, the Dutch Company was compelled to lower the price of oil and to reduce its dividends to 6 per cent. But the rate began to rise again in 1900, and reached 24 per cent in 1901.

At its very beginning it found in the East a young British firm, the Shell Transport and Trading Company, which put up a keen competition, the more disastrous because the latter possessed a fleet of tank steamers, while the Royal Dutch as yet had none.

The agreement of 1902, by which the two companies entrusted the sale of their products to a company which they created specially for the purpose was known as the Asiatic Petroleum. Its capital was subscribed

as follows:

1/3 by the Royal Dutch.

1/3 by the Shell Transport.

1/3 by the Rothschilds.

This simple alliance became a complete union ten years later. The Royal Dutch and the Shell amalgamated on the following basis:

On January 1, 1907, the two groups transferred their assets to two companies, one Dutch, one British. There were the Bataafsche Petroleum Maatschappij (or the Batavian Oil Company) and the Anglo-Saxon Petroleum.

a. The Batavian Oil Company.

It had a capital of two hundred million florins and was especially entrusted with the extraction of oil and with everything concerning its production. Its oil fields are situated in Java, Sumatra and Borneo, and it exploits them directly or by subsidiary companies,

Directly or indirectly, it is responsible for almost the whole production of the Dutch Indies, which amounts to nearly 20 million barrels annually, and is steadily rising. To meet this increase, the Batavian Oil Company is obliged every few years to construct new reservoirs. In 1920 their capacity had reached more than 900,000 tons.

b. The Anglo-Saxon Petroleum Company.

Its head-quarters are in London. The concern was entrusted with everything concerning the transport and sale of oil, that is to say, with the commercial side of business. This company undertook no direct exploitation, although it controls the production of a large number of subsidiary companies in Ceylon, British India, Malay, Bor-

thern and Southern China, Siam, the Philippines, Australia, New Zealand and South Africa.

One company is entrusted with the distribution of its products, another with the exploitation of oil fields or with refining. Forty per cent of the profits resulting from this corporation were to come to the Shell, sixty per cent to the Royal Dutch.

The Royal Dutch-Shell group is now a world power. Five factors have contributed to the world-wide expansion of the Royal Dutch-Shell.

1. Deterding's cleverness in associating the Royal Dutch with the Shell, and in interesting the Rothschilds of Paris in his operations.
2. The support of the Dutch Government.
3. The support of the British Government.
4. The fact that the Royal Dutch-Shell had not a market close at hand to absorb its production, in the Dutch Indies.
5. The readiness of the Dutch and British to protect over seas.

The eminently suggestive list of companies controlled by the Royal Dutch-Shell will give an idea of the net work which it hasspread all over the world. Its annual production, which was 25,000 tons increased in 1922 to one and one-half million tons. In 1923, it amounted to one million, four hundred thousand tons.

3. The Mexican Eagle Oil Company.
(Compania Mexicana de Petroleo El Aguila).

The Pearson group acquired interests the rich fields of Tampico, situated right upon the shore of the Gulf of Mexico and formed the Mexican Eagle Oil Company in 1908.

4. The Colon Development Company.

The Shell Transport proceeded to establish itself in Trinidad (a British Colony), then in Venezuela and Colombia. By joint action with the American Carib Syndicate, it formed the Colon Development Company as a British company. Subsequently it transpired that all the British shares were held by the Burlington Investment Company, which is dependent upon the Shell Transport.

5. The Anglo-Persian Company.

The Anglo-Persian Company began obscurely. Its inception, in 1909, passed unnoticed. It was founded, without an appeal to the public to subscribe its capital, by the Burmah Oil Company, a company at that time better known in Scotland than on the London Stock Exchange. Its first object was to take over the concessions which the Australian, D'Arcy, had obtained in 1901.

In May, 1914, the Anglo-Persian made the negotiations and then contracted with the Admiralty. It was conducted with the greatest secrecy. Two-thirds of the ordinary shares of the Anglo-Persian are in the hands of the British Government, the other third is held by the Burmah Oil, which is directed by the Admiralty. Thus the Anglo-Persian is a state-subscribed company.

The Anglo-Persian controls an almost unlimited production in Persia. But the Anglo-Persian was no longer content with Persia, rich as it was. Its ambitions extended to the whole world. In French territory alone, reservoirs will be constructed in the port of Dunkirk, Le Haver, Roven, Saint-Nazaire, La Pallice, Bordeaux, Marseilles, Bizerta, Algiers, Oran, Casablanca, Dakar.

Wherever geological conditions appear to indicate the presence of oil in commercial quantities, the operations of drilling are undertaken. Such activities were carried on during 1922 and 1923 in Great Britain, Australia, New Zealand, Canada, Hungary, and recently the company has concluded arrangements for investigating and prospecting in districts of France and her colonies which are likely to produce oil. We will see what the Anglo-Persian did during 1920.

October,27, 1920: According to the agreement signed in London by Sir Basil Zaharaff for the Banque de la Seine, nine subsidiary companies will be founded. This "Franco-British Anglo-Persian will also build an oil fleet.

December 1920: It obtained a footing in Spain, founding a company with a capital of twenty five million pesetas, of which fifty five per cent were subscribed by the Anglo-Persian and forty five per cent by a Spanish group. The Anglo-Persian founded a company with a capital of 1,000,000 pounds under the agreement at Budapest for exploration. The company had to deposit with the Government 25 per cent of the shares, and to undertake to hand over to it each year one-tenth of the production in kind or in money. The Anglo-Persian also has obtained possession of the oil bearing territory of Transylvania, ceded to Rumania. In addition to this, it has taken over the share which was reserved for British in the German interest in Steaua Romana, and disposed of nearly 80 per cent of the share in the Turkish Petroleum, which has claims to

oil concessions in Mesopotamia.

In October 19, 1912, the Anglo-Persian made an agreement with the Japanese company Tei-Koku, undertaking to supply it with 350,000 barrels of petroleum yearly. Half of this is destined for the Japanese Navy.

In cooperation with the Austrian Government from which it had already obtained, in May, 1920, exclusive rights in the former German colonies of Papua, the Anglo-Persian founded the Commonwealth Oil Refineries, with a capital of 500,000 pounds.

In New Zealand it has offered to subscribe 50% towards the formation of a capital of 100,000 pounds for prospecting purposes.

6. The British Controlled Oil-fields.

It was in 1918 that this corporation was established under Canadian law with an initial capital of 12,000,000 pounds, increased later to 40,000,000 and capable of further increase up to 159,000,000 pounds. The British Controlled Oil-fields will be one of the greatest financial powers of the world. Like the Anglo-Persian, it is entirely in the hands of the British Government under the system of the voting trust. It possesses properties of very great value from Mexico to Brazil, in Trinidad, Venezuela and Costa Rica.

The concessions of the British Controlled Oil-fields are nearly always on the sea-coast -- or rather in close proximity to the sea -- which is a considerable advantage.

7. The Turkish Petroleum Company.

Collaborating with the Royal Dutch-Shell, Great Britain created the Turkish Petroleum Oil Company, a few months before the

declaration of the War in 1914 (June 26, 1914). Now the Turkish Petroleum had obtained from the Turkish Government the grant of all the naphtha of the vilayets that the French lost in renouncing the Sykes-Picot Agreement of 1916.

The rights of the Turkish Petroleum, at present, however, rest squarely on the convention signed between the Company and the Government of Iraq on March 14, 1925. The instrument which now defines the status of the Turkish Petroleum in Iraq, stripped of the usual subsidiary and regulation clauses, covers the following cardinal points.[9]

1. Exclusive oil rights in defined areas, for seventy five years, at the end of which all the company's property shall revert to the Government of Iraq free of charge.

2. These rights to apply to all Iraq, except the transferred territories and the former vilayet of Basrah.

3. Geologic survey within eight months; within thirty two months selection by the company of twenty four rectangular plots, each of an area of eight square miles; drilling operation within three years.

4. Royalties to the Iraq Government: 4 shillings per ton on net oil production for twenty years after the completion of pipe line; afterward to be based on market value of oil over ten-year periods; two-pence per thousand cubic feet of natural gas.

5. The company to remain a British company registered in Great Britain, and its Chairman to be at all times a British subject. The English version of the agreement to prevail over the Arabic.

The contract was signed by Muzahim Beg Al Pachachi for the Iraq Government, and by Edward Herbert Keeling for the Turkish Petroleum.

4. OIL POLICY IN DETAIL.

British Oil Policy in Asia and Australia.

A. Persia and Mesopotamia oil fields.

a. Purchase of the Anglo-Persian Oil Company, aiming at monopoly of the Persian oilfields.

1. In 1901, an Australian, W. K. D'Arcy had obtained the concessions from the Persian Government for the infinitesimal sum of 200,000 francs, of which 100,000 francs only were paid in cash and the rest in shares. The Persian Government was to receive 16 per cent of whatever profits D'Arcy might take.

It was much disappointed, for the first investigations along the Turko-Persian frontier were really discouraging. D'Arcy spent five million francs in vain and he was thinking of abandoning the whole affair.

2. In April, 1909, the Anglo-Persian Oil Company was established, aiming to amalgamate the rights which D'Arcy had been given by the Persian Government. The amount of capital was 2,000,000 pounds, beside bonds amounting to 600,000 pounds with interest at the rate of 5 per cent.

3. In May, 1914, the British Government had a certain majority of two thousand votes by the purchase of 2,200,000 pounds (common stock, 2,001,000 pounds; bonds, 199,000 pounds) of new ordinary shares.

4. An agreement was concluded at Teheran, Persia, on August 9, 1919, between the British and Persia in regard to the future political economical and financial relation of the two countries. The British were ready to mandate Persia by this time.[1]

Even at that time, London representatives of American oil interests viewed the agreement as an attempt to assume British control over the great Persian oil fields --; in this connection the London Chronicles's financial editor said that while the agreement was preeminently political, it was also true that the Government controlled the Anglo-Persian Oil Company, and no doubt had an eye on its financial interests in Persia.

5. The capital has since been more than doubled, for on March 6, 1921, the Government announced in the House of Commons that it held 5,200,000 pounds ordinary shares, 1,000 pounds preferenced shares, and 199,000 pounds debentures.

The Government has in its hands two-thirds of the ordinary shares of the Anglo-Persian. The other third is held by the Burmah Oil, which is directed by the Admiralty. Thus absolute Government control is assured.

6. Finally, the Government has made a contract with the supply of important quantities of oil at an advantageous price for a certain number of years. The needs of the Navy are thus guaranteed for a period of years.

7. The oil deposits of Persia are so rich that in the future the Anglo-Persian, by itself, will be in a position to supply a large proportion of the needs of Great Britain.

b. Establishment of the Northern Persian Oil Company in 1920.

The aim of this company is to explore oil fields of the northern part of Persia. The capital was jointly subscribed by London capitalists (300,000 pounds) and the Anglo-Persian.

Thus, Persia is a part of Great Britain at present, in regards to the oil supply. There is no surprise to be feared for the oil fields are near the Persian Gulf, where Great Britain is mistress, and where

no foreign ships can enter without her permission. It is, however, an important strategic point; ships can be despatched from there to all parts of the world where Great Britain has interests -- Suez, Gibralter, India, Australia, Africa.

c. Mesopotamia - Mosul.

1. According to the agreement of 1916, Mosul was in the French zone of influence in Arabia.

2. Great Britain began by obtaining the cession of French territorial rights, as recognized by this treaty.

3. "The petroliferous basin, which extends from Persia to Mesopotamia, is one of the most extensive as yet discovered in the whole world. The great deposits reach as far as twenty miles to the north of Mosul. In the valley of the Naphat, the oil flows naturally into the river." 9

4. As early as 1903, the Imperial Ottoman Bagdad Railway Company, the famous Bagdad Bahn, obtained the grant of the right of exclusive exploitation of all deposits found within a distance of fifty kilometers from its lines.

5. Germany transferred this right to the Turkish Petroleum when the latter company was created in 1914.

6. By the interpretation of the Franco-British agreement of May, 1916, France was completely outside of the oil production of Mesopotamia.

7. "The former province of the Ottoman Empire in which oilfields lie was occupied by British and Arab forces after the Allied armistice with Turkey was signed at Mudros on October 30, 1918; and the British have ever since maintained there a de facto regime by force of arms,

without the sanction of any international treaty or the consent of the Turks, who are the legal authorities."[h]

8. By the Treaty of Sevres, the San-Remo Conference of 1920 settled the Turkish question; Mesopotamia,which later became the Kingdom of Iraq, was made independent.

9. Britain was given a mandate over it by the League of Nations.

10. The Mosul area, included in the Chester group grant, thus became British territory.

11. Until last March, 1925, the Government controlled concern owned 50 per cent of the stock of the Turkish Petroleum, which on March 14 of that year obtained a concession from the British controlled Iraq Government, looking to an effective monopoly of the Mosul oil deposits.

12. The claim of Iraq to political control of Mosul has been vigorously pressed by British Colonial officials in accordance with the Anglo-Iraq Treaty of 1923.

13. "That an attempt will be made to legalize the British de facto regime is shown by the decision of the Permanent Court International Justice at the Hague, on November 21, 1925. This decision was markedly in favor of the British thesis regarding Mosul. In fact, the Court decided despite Turkish protest, that the Council of the League had full power to settle the mosul question whether the Turks agreed or not."[i]

14. The Mosul question had yet to come before the Council of the League of Nations, and it will be interesting to see what the decision will be.

d. Anglo-French Oil Agreement.[5]

It was signed on April 24th, 1920 at San Remo. Through this agreement, we can observe more clearly the oil policy of Great Britain and France in this part of the world. This agreement is also worth noticing because it brought the United States openly into the struggle for oil in Mosul. Following is the outline of the agreement.[6]

1. Rumania: "It is agreed that for ex-enemy concessions, as for those which France will be able to obtain in the future from the Rumanian Government, Franco-British companies constituted, in which each of the two countries has half the capital and half the voting power on the board of directors."

2. Russia: "It is stated that the two Governments will grant their "joint support" to those of their nationals who make "joint efforts" to obtain concessions, and to export and deliver oil."

3. Mesopotamia: "The British Government undertakes to grant to the French Government 25 per cent of the net output if the Mesopotamian oil fields are developed by Government action. If a private company is used, the British Government will place at the disposal of the French Government a share of 25 per cent in such company."

"It is also understood that the said petroleum company shall be under permanent British control."

4."In the French colonies, protectorates, and zones of influence, including Algeria, Tunis and Morocco, the French Government will facilitate the acquisition of concessions to every Franco-British group of good standing and furnishing the necessary guarantees. In return, the British

Government will accord the same advantages to French prospectors who may wish to work within the British Empire."

e. Protest of the United States.[6]

"At this point, the Standard Oil Company put in its claim for a share in the exploitation of the Mosul field on the basis of the Open Door Policy. Behind the attempts of the Standard Oil to penetrate into the fields of the Near East, the entire government machinery at Washington lined up."[k]

American Note to Great Britain.[l]

"On November 20, 1920, Mr. Colby, Secretary of State sent a note addressed to Lord Curzon on the Mesopotamian oil agreement informing Great Britain politely but firmly that the American Government does not propose to be excluded from participation in privileges secured under the mandate provided in the Treaty of Peace."

1. "It declares that the United States as a participant in the World War and contributor to its successful issue cannot consider any of the Associate Powers, not even the smallest, as being any more than itself debarred from the discussing of any of its consequences."

2. "The note proceeds to recall that it has been the consistent policy of the United States that the alien territory transferred as a result of the War should be administered in such a way as to assure equal treatment to the commerce and citizens of all nations."

3. '"The fact cannot be ignored that the reported resources of Mesopotamia interest public opinion in the United States, Great Britain and other countries, as a potential subject of economic

strife, and because of the fact that they have become a peculiarly critical test of the good faith of the nations which have given their adherence to the mandate principle. This principle was accepted in the hope of obviating in the future those international differences which grow out of the desire for the exclusive control of the resources and markets of annexed territories".

3. "Mr. Colby frankly stated that the American Government finds difficulties in reconciling the special arrangement set forth in the so-called San Remo Petroleum Agreement, between Great Britain and France, with the British Government's statement that the petroleum resources of Mesopotamia and freedom of action with regard to them will be secured in the future Arab State, as yet unorganized."

4. "Furthermore, it is difficult to harmonize that special arrangement with your statement that concessionary claims relating to those resources still remain in their pre-war position, and have yet to receive with the establishment of the Arab State the equitable consideration promised by his Majesty's Government, In this connexion the American Government has noted the public statement of the British Minister in charge of problem affairs that the San Remo Agreement was based on the principle that concessions granted by the former Turkish Government must be honored. I would be reluctant to assume that his Majesty's Government has already undertaken to pass judgment upon the validity of the concessionary claims in the regions concerned, and to concede the validity to certain of those claims which cover apparently the entire Mesopotamian area."

5. The Note made specific reference to the Turkish Petroleum Company, which, according to the information of the State Department, possessed in Mesopotamia, before the war, no rights to petroleum concessions or to the exploitation of oil, and Mr. Colby adds:

"In view of the assurance of the British Government that it is not the intention of the mandatory power to establish in its own behalf any kind of monopoly, I am at a loss to understand how to construe the provision of the San Remo Agreement that any private petroleum company which may develop oilfields in Mesopotamia 'shall be under permanent British control.'"

6. He (Mr. Colby) concludes:

"This dominion of territories brought under the temporary control of the Allied Associated Powers will be wholly misconceived, not to say abused, if there is even the slightest deviation from the spirit and exclusive purpose of a trusteeship as strict as it is comprehensive."

This was published by the American Press on the 24th of November and it appeared on November 27 in the London Times, from which this is quoted.

f. Lord Curzon's reply to the U. S. A.[7]

Lord Curzon's reply, which is dated February 28, appeared in the English Press on April 6, 1921. Following is its outline:

1. "The cooperation of British and French interests in regard to oil production in various countries was first suggested in the early part of the year 1919 by the French Government, when it was proposed that some arrangement should be arrived at whereby French interests might be given some participation in the production of petroleum in various regions."

"The agreement aimed at no monopoly or exclusive rights, and could only become effective if its application conformed to the desires and laws of the countries concerned."

2. "The whole of the oilfields to which those provisions refer are

the subject of a concession granted before the war by the Turkish Government to the Turkish Petroleum Company. The position of such concession in territory detached from Turkey is expressly safeguarded by Article 311 and 312 of the Treaty of Sevres.

3. "The acquisition by the French Government under the San Remo Agreement of an interest in the Mesopotamian oilfields represents the allotment to the French Government of the former German interests in the Turkish Petroleum Company in return for facilities by which Mesopotamian oil will be able to reach the Mediterranean."

4. "Neither the rights of the Turkish Petroleum Company, nor the provisions of the San Remo Oil Agreement, will preclude the Arab State from enjoying the full benefit of ownership, or from prescribing the conditions on which the oilfields shall be developed.

5. The British Government has no desire whatever to deny the United States a share in the expansion of the petroleum industry of Mesopotamia.

6. Lord Curzon's reply draws attention to the fact that London by no means agrees with Washington on the estimate of the petroleum resources of the various nations.

7. "While the petroleum of the future is necessarily problematical, undisputed fact remains that at present United States soil produces 70 per cent and American interests in adjoining territory control a further 12 per cent of the oil production of the world. It is not easy, therefore, to justify the United States Government's insistence that American control should now be extended to resources which may be developed in mandated territories, and that, too, at the expense of the subjects of another State, who have obtained a valid concession from former Governments of those territories.

8. The British Government, nevertheless, is "in general agreement with the contention of the United States Government, that the world's oil resources should be thrown open for development without reference to nationality."

9. "I (Lord Curzon) observe, however, that by Article 1 of the Act of the Philippine Legislature of August 31, 1920, participation in the working of all 'public lands containing petroleum and other mineral oil and gas', is confined to citizens or corporations of the United States or of the Philippines, and I cannot but regard this enactment as in contradiction with the general principle enunciated by the United States Government.

10. In connection, Lord Curzon pointed out that "Mr. Colby does not attempt to refute the statement contained in my Note of August 9,(1920) last concerning the action taken by the United States Government to prevent the exploitation by British interests of such resources in Hayti and Costa Rica."

B. Other Oil Fields.

a. Closed door policy in India and Burmah.

Foreigners are prohibited from developing oil industries. The Burmah Oil Company, established by British capital, was protected from competition by the Government since 1885. The Royal Dutch supplies it with petroleum that was needed to satisfy the Indian market.

b. East Indies Oil Fields and Purchase of the Shell Company.

In 1917, the British Government appropriated shares owned by the English, by the Defence of Realm Act.

Oil fields in Java, Sumatra and Borneo are controlled by the

Batavian Oil Company, subsidiary to the Royal Dutch-Shell. It will be quite obvious how the British Government wields its influence over this territory through the Royal Dutch-Shell.

c. East Indies Oil Company.

The East Indies Oil Company was established by the Batavian Oil Company in July, 1921, after the agreement with the Holland Government. Both (Holland Government and the Batavia Oil) subscribed 5,000,000 guldens each as capital of a new corporation.

The Australian Government Oil Policy.

1. A bounty is given for drilling.

For four years from September 1, 1917, 67,500 pounds were vested every year, to encourage the drilling of oilfields in the country.

2. Oil Importation.

An agreement was made between the Government and the Anglo-Persian to establish oil stations in Australian ports. Reservoirs were constructed by the Anglo-Persian with a capital of 500,000 of which 250,000 pounds was contributed by the Australian Government.

3. Papua.

In May, 1920, the Government, under the understanding of the British Government, gave exclusive rights in the former German Colonies of Papua to the Anglo-Persian. Both Governments subscribed 10,000 pounds each for the cause.

4. New Zealand.

The New Zealand Government and the Anglo-Persian are cooperating in the oil industries. Oil industries are being encouraged and the Government itself is planning for the drilling of deep pools.

China.

Establishment of the Shinkan Oil and Mining Company in Shinkan Province in October 1920.

The capital, 1,000,000 pounds, was subscribed by both Governments, (British and Chinese) in the same amount. These oil fields are among the richest in China.

It is said that the British Coal Mine Company has concessions in Shinkan Province.

America.

A. Mexican Oil Fields.

1. The British firm of Pearson was granted important concessions. Shortly afterwards it founded the Mexican Eagle, in 1908. Its capital was originally thirty million Mexican dollars and was increased to fifty millions in 1911. In 1920, it was eighty six million, two hundred seventy seven Mexican dollars.

2. Then came a time of unrest and fighting, and a civil war began in order to drive the British from Mexico. However, the Eagle remains triumphant. It was undisturbed by the Constitution of 1917.[8]

3. Although it holds in reserve the greater part of this domain, its output exceeds 100,000 barrels a day.

4. The Royal Dutch-Shell group became interested in the Mexican Eagle in 1919.

5. In 1918, the United States capital in the Mexican oil industry was estimated to be about $500,000,000 while the British capital was only

$100,000,000. In 1920, however, the United States capital was $600,000,000 against $500,000,000 of British capital.[9] Assuming this figure to be correct we realise the rapid increase of British capital in the Mexican oil industry.

c. The British Controlled Oil Fields, which is in the hands of the British Government, possesses property of very great value from Mexico to Brazil.

B. Other Oil Fields.

a. The Royal Dutch-Shell in the U.S.A.

The Royal Dutch-Shell formed a new trust, uniting the companies hitherto independent: The Doheny group and the British Pearson Syndicate, the Associate Oil, the Oklahoma Producing and the Oil Union of Oklahoma, with six or eight other undertakings which have been successfully conducted during the last few years. It now controls a great part of the oil fields of California and Louisiana.

The Shell brought into the Mexican Petroleum Company of Delaware, a sister company, the Eagle. "The Mexican Petroleum Company of Delaware has control of a large number of companies in the United States and in Mexico, which include the following:-

Mexican Petroleum of California,
Huasteca Petroleum,
Tamakua Petroleum,
Tuxpan Petroleum,
Mexican Petroleum Corporation."[m]

b. British capital will be found in all the following regions of oilfields:-

Venezuela (Royal Dutch-Shell)

Colombia " " "

Bolivia and Argentine.

Peru : The U.S. controls 80% of the oil industry in Peru; while Britain controls 27%, and Italy 3%.

c. Trinidad.

All foreign capital is excluded from oil industries in Trinidad by the British Government.

5. THE OIL [illegible].

" From now on we may seek the world over, and we will not find a single producing country in which the British group has not control of important sources of oil as the following table will show:

Europe:
   Rumania (Royal Dutch-Shell)
   Russia " " "

America:
   California (~~Shell-Royal Dutch~~) Royal Dutch-Shell
   Oklahoma " " "
   Texas " " "
   Trinidad " " "
   Venezuela " " "
   Mexico " " " (Mexican Eagle)

Asia:
   Dutch East Indies (Shell-Royal Dutch)
   Burma (Burmah Oil Company)
   Persia (Anglo-Persian Company)

Africa:
   Egypt (~~Shell-Royal Dutch~~) Royal Dutch-Shell.

Today, on all the trade routes of the globe, Britain if she pleases, can duplicate her coaling stations with oiling stations. She

no longer has to fear an American monopoly. In the matter of liquid or solid fuel for her merchant marine and her navy, the British Empire retains her independence."[n]

"It must be admitted that the entire production of the Anglo-Dutch combinations does not reach one-third of that of the Standard Oil. But oil lands of the United States are being rapidly exhausted; according to American estimates, their total supply does not exceed 7,000 million barrels, while the rest of the world possesses 53,000 million; and the bulk of these reserves have by this time been secured"[o] by Great Britain. "Ten years ago, Britain possessed no oil, today she is independent, tomorrow she will be mistress."[p] It is no wonder that E. C. Eckel desperately remarked:-

".....so we may assume that of the known and probable petroleum reserve of the world, at least two-thirds and perhaps over four-fifths is now in the hands of the British Government directly, or of British corporations. ..... Barring some unforseen development we (Americans) may be in the embarrassing position during our next war of asking British permission before our battleships can go to sea."

"The feat has been accomplished by the silent efforts of a few men such as Sir Marcus Samuel, chairman of the Shell Transport, Lord Cowdray, head of the Pearson group, Lord Curzon, formerly Viceroy of India, and Professor Sir John Cadman. By the combination of technical knowledge business experience, and diplomatic skill, they have succeeded in the most unfavorable circumstances, in quietly carrying out a great and far-reaching scheme. They have planned boldly, followed up tenaciously, and seized the right moment for decisive action, thus giving an admirable example of what may be achieved by a few men of genius at the head of a great Empire when

they are put on their mettle."[9]

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1. Japanese Navy's policy is something like this at present.

2. 66th Congress, 2nd Session, House of Representatives, Document No. 801. "Advance in the price of petroleum product."

3. Current History, January, 1926.

4. Current History, 1919, pp. 342-347.

5. Delaisi, Francis: Oil, its Influence on Politics. Appendix.

6. This was published by the American Press on the 24th of November, 1920, and it appeared in the London Times on November 27th. It is quoted from the Times.

7. London Times, April 6, 1921.

8. See in the "U. S. Oil Policy". in this paper

9. From the "Tokyo Asahi", August, 1925.

10. Great Britain "Miscellaneous", No. 11 (1920. Political Science Quarterly, Vol. 39, pp. 265-279.

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a. Delaisi, Francis, *Oil*, p.20.

b. Delaisi, Francis, *Oil*, p.20.

c. Delaisi, Francis, *Oil*, p.2I.

d. Delaisi, Francis, *Oil*, p.2I.

e. 66th Congress, 2nd Session, House of Representatives, Document No. 80I. p.23. I found the exactly the same sentences in De La Tramerye, *The World Struggles For Oil*, in p.I64.

f. This article, "British Oil Companies", is practically quoted from De La Tramerye, *The World Struggles For Oil*, Chapter V.

g. John Carter, *The Bitter Conflict Over Turkish Oilfields*. Current History, Jan., I926.

h. Current History, Jan., I926. p.492.

i. Current History, Jan., I926. p.492.

j. The outline was practically parts of the whole document.

k. Nearing S. and Freeman J., *Dollar Diplomacy*.

l. Practically it is taken from the London Times, Nov. 27, I920.

m. De La Tramerye, *The World Struggles For Oil*, p.8I.

n. Delaisi, Francis, *Oil*, p.3I.

o. Delaisi, Francis, *Oil*, p.3I-32.

p. Delaisi, Francis, *Oil*, p.32. De La Tramerye used the same sentence on p.I52 in his book, *The World Struggles For Oil*, without useing quotation.

q. Delaisi, Francis, *Oil*. p.32.

CHAPTER VI.

OIL POLICY OF
THE UNITED STATES OF AMERICA

I. INTRODUCTION.

In 1923, it was estimated that the total oil product of the world was 1,[illegible],000 barrels, of which the United States of America produced 732,407,000 ~~725,702,000.~~ For ~~In~~ 1924, the ~~estimation~~ were increased to 1,130,100,000 barrels, of which the U. S. produced 713,940,000 ~~[illegible],000~~. The statistics show that she contributed 70 per cent of the world's oil production. During the war, she supplied 80 per cent of the Allies' needs.

The following table will tell how Uncle Sam's oil industry made a great expansion during the last decade.[1]

	1913	1923
Total capital in oil industry	$1,136,718,000	$9,000,000,000
Oil produced	248,446,200 barrels	725,702,000 barrels
Pipe line	40,000 miles	75,000 miles
Gasoline produced (1914-1916)	1,503,600,000 gallons	7,555,954,143 gallons
Oil and oil products, exported	40,571,416 barrels	79,743,760 barrels
Machine oil, produced	641,[illegible],767 gallons	1,097,358,222 gallons
Tank steamer	290,531 tons (52)	3,739,161 tons (45) ?
The largest tank steamer	10,090 tons	21,257 tons
Used in railroad (1919)	33,204,251 barrels	57,641,299 barrels

	(1920)	
Fuel for Navy	6,051,019 barrels	5,200,000
Total consumption	185,513,476 barrels	249,096,938

The oil industry in the U. S. practically began in 1859. The operation for obtaining oil by means of artesian wells succeeded for the first time under the control of Mr. E. L. Drake. At first the well yielded about 25 barrels daily to the pump, but its production rapidly diminished, until, at the close of the year, it did not amount to more than about 5 barrels daily. The total yield during 1859 is said to have been under 2000 barrels.[3] But the success of the Drake well led to the rapid development of the oil industry. The oil product reached 4,000,000 barrels per year, during the next ten years.

In the early period little attention had been paid to the oil industry for two reasons, one, because of financial difficulties of the Government and the other because of a lack of a clear understanding of its significance. Up to the World War, proud of her abundant oil resources and confident of her ability to control the oil industry of the world, the U. S. did not give her oil industry any protection.

During Roosevelt's Presidency in 1911, moreover, on account of the Sherman Law, or anti-trust law, the Supreme Court of the United States declared it was illegal for the Standard Oil Company to own ninety per cent of the pipe lines and to control eighty six and one half per cent of the oil production of America.

Although the Government made Geological Surveys all over the oil fields, its policy to the oil industry was left entirely free in these

periods. After the great War, however, recognising the importance of oil industry and aiming to supply herself she turned to the protective policy gradually, and in 1920, she did not hesitate to come up to the frontier line of oil struggles in Mesopotamia openly. There are several reasons why she had to do so.

1. Rapid increase in consumption.

The U. S. consumed twice as much oil as the rest of the world up to 1915. But in 1924, she consumed ~~only~~ 80 per cent of the world's total oil product. It is noteworthy that at the same time the rate of consumption is rapidly increasing year after year. Thus, consumption outruns the production.

2. Rapid increase in importation.

In 1918, the U. S. imported 39,000,000 barrels of oil from Mexico and in 1921, three years later, 128,000,000 barrels, which corresponds to 25 per cent of the total consumption of the country. It increased three-fold during the three years. According to Mr. George Cadman, English oil industry authority, the U. S. must, before 1930, import more than half of its total consumption of oil.

3. Rapid exhaustion of resources.

On the 2nd of May, 1919, the Geological Survey published this note and its main points are as follows:

"The foreign countries consume at present 200 million barrels a year; at this rate, they have sufficient reserves for 250 years."

The U. S., "with a consumption of 400 million barrels a year, have an assured supply for only 18 years."

4. Sir E. Mackay Edgar's Challenge. (more or less accidentary) [3]

In Lord Northcliffe's "Times", Sir Edward Mackay Edgar, Bart., displayed the results of the painstaking subterranean labors of Sir Marcus Samuel, Lord Curzon, Sir Cadman and other "petroleum statesmen. Having described the world-wide stranglehold of Britain, Sir Edward added pitilessly:

"We shall have to wait a few years before the full advantages of the situation shall begin to be reaped, but that harvest eventually will be a great one there can be no manner of doubt. If the present curve of consumption is maintained, America in ten years will be under the necessity of importing 500 million barrels of oil yearly at $2.00 a barrel--a very low figure--and that means an annual payment of $1,000,000,000 per annum, most, if not all, of which will find its way into British pockets."

"With the exception of Mexico, and to a lesser extent of Central America, the outer world is securely barricaded against an American invasion in force. There may be small, isolated sallies, but there can never be a massed attack. The British position is impregnable."

To conclude, he added ironically:

"This is no revlation. The U. S. experts have been well aware of this situation for more than a year. But Congress and public opinion were not on their guard. The public at large, convinced that America is an immense reservoir of petroleum, and never having seen its engines stop for want of oil, took it for granted that petroleum is a product which grows naturally, like apples on apple trees. Unfortunately for them--and fortunately for us--their eyes have been opened too late."

XI. GENERAL POLICY:

Sir E. Mackay Edgar's challenge created a great stir among the public and still more in political circles. "The veil was rudely torn away, and behind the motley curtain of the Anglo-Dutch trust America suddenly discovered the long prehensile fingers which were beginning to filch barrels of petroleum all over the world, and even within her own borders."[a]

In the face of this situation, Senator Gore of Oklahoma, on March 10, 1920, demanded of the Federal Government a report upon the measure taken by foreign Governments to exclude America from oil-fields. Two months later, on May 17th, President Wilson transmitted to the Senate the report of the Secretary of State.

Since this time the United States oil policy has swung back rapidly to the protective rather than to the old free policy. We can see it in the speech of Senator Jones, President of the Committee on Commerce:-

"I admire Great Britain for what she is doing, how she stands behind her citizens, how she stands behind her industries, and I would like to take a leaf out of her book. Let us stand behind our people as she stands behind hers. Let us encourage our people as she encourages hers. Let us do what is necessary for our interests as she does whatever is necessary for her interests."

The general oil policy of the United States may be summarized into three big items:

1. The first precaution was obvious -- to close, for the future, to foreigners, and particularly to the British the oil bearing land within the actual territory of the Union.

2. Secondly, the United States is trying to bring the Mexican oil fields under her control. When the Mexican Government hoped to be free from the diplomatic interferences by means of the Constitution of 1917, President Harding demanded through Mr. Fall, the American Minister of New Mexico that American citizens should not be expelled from Mexico on the simple order of the President of the Republic.

The Committee of the United States Senate had undertaken to recognize the New Mexican Government only on the condition that the article of the Constitution of 1917 which forbids foreigners to hold mineral rights was not applied to the United States citizens during those days.

3. Thirdly, claim for the "open door".

a. The struggle for Mesopotamia.

On November 20, 1920, Mr. Colby, Secretary of State, sent a note to Lord Curzon, in which he protested against the exclusion of America from Mesopotamia.[4]

b. The struggle for Djambi (May, 1921).

Mr. Hughes, the Secretary of State, ordered the United States Ambassador to insist vigorously that the Dutch Government should grant the same facilities in the Dutch Indies to American companies as to other companies.

Based on the three principles, stated above, the United States

carried on her policy as follows:

1. On the 28th of April, 1920, a vote of the Senate authorized the Secretary of the Navy to set apart as "reserves", in any State he wished, petroliferous lands, which then were not to be sold or leased without his permission. The reason involed was the necessity of safeguarding supplies of oil for the Navy.

2. The system of reciprocity was inaugurated by President Harding. Governments which allow free competition to American companies receive the same treatment.

3. The General Leasing Act of 1920, forbids the leasing of wells by a corporation of foreign shareholders, unless these latter belong to a country which grants reciprocal treatment.

4. Mr. Daniels, Secretary of the Navy, wished to get a Bill passed through Congress, authorizing the President to place an embargo on the export of petroleum.

(Although the same proposal was made frequently, it is not reported that such attempts were successful.)

5. The American Oil Association is proposing several means to promote the oil industry of the country. These are as follows:[5]

a. Corporative investigations of persons of the same trade for the various problems of the oil industry.

b. Uniform laws in the Union.

c. Investigation of foreign market.

d. Protection against the foreign competition.

e. Cost accounting; labor condition; transportation of oil should

be thoroughly studied.

f. Making of the statistics concerning the oil industry.

g. Magazine should be issued for these purposes.

h. Establishment of the investigation Bureau.

In the first place the Association contributed $1,000,000 as the expense for the improvement, invention, and laboratory work and trying the technical improvements.

6. The Federal Oil Conservation Board. (designated by President Coolidge, December 19, 1924).

"The Oil Conservation Board, appointed by the President, is composed of the Secretaries of War, Navy, Interior, and Commerce (Work, Wilbur, Weeks, and Hoover). It has asked the oil industry to send its best experts to Washington.

"The private interests engaged in producing and refining petroleum are keenly alive to the danger to their industry and to the nation's needs resulting from overproduction and waste, and they seem to be entirely in sympathy with this effort to bring some regulated order into the business of taking the mineral from the earth.

The Commission will deal with the question of how to put on the brakes when a new pool is "brought in" at a time when additional production is not needed."[b]

President Coolidge's letter constituting the Federal Oil Conservation Board is probably one of the best sources from which we may learn how the United States Government is paying such great attention to her oil industry. The letter was dated December 19, 1924, and the first meeting of the Board was held on January , 1925.

In his letter, the President stated:[6]

"It is evident that the present methods of capturing our oil deposits is wasteful to an alarming degree in that it becomes impossible to conserve oil in the ground under our present leasing and royalty practices if a neighboring owner or lessee desires to gain possession of his deposits.

"Developing aircrafts indicate that our national defense must be supplemented, if not dominated, by aviation. It is even probable that the supremacy of nations may be determined by the possession of available petroleum and its products.

"I am advised that our current oil supply is kept up by drilling many thousands of new wells each year, and that the failure to bring in producing wells for a two-year period would slow down the wheels of industry and bring serious industrial depression. The problem of a future shortage in fuel and lubricating oil, not to mention gasoline, must be avoided or our manufacturing productivity will be curtailed to an extent not easily calculated.

".....Oil, of which our resources are limited, is largely taking the place of coal, the supply of which seems to be unlimited, but coal cannot take the place of oil in most of its higher uses, on land or sea or in the air.

"For the purpose of giving this responsibility of government in all of its aspects the consideration it demands, I have constituted a Federal Oil Conservation Board consisting of the Secretaries of War, Navy, Interior, and Commerce, to study the Government's responsibilities and to enlist the full cooperation of representatives of the oil industry in the investigation. The Government itself is at present one of the largest lessors of oil lands,

and the public domain still include large undeveloped reserves of oil, so that the administration of oil resources is a practical question with the Department of the Interior.

"I would express the desire that these conferences may be open and exhaustive. The oil industry itself might be permitted to determine its own future. The future might be left to the simple working of law of supply and demand but for the patent fact that the oil industry's welfare is so intimately linked with the industrial prosperity and safety of the whole people, that Government and business can well join forces to work out this problem of practical conservation.

"Last May (1924) I appointed a commission to advise me on the special subject of the best policy to insure the future supply of fuel oil for the Navy. That commission will continue to function in its limited field and might to advantage sit with the Conservation Board in the conferences I expect will be between these,our Secretaries, directly concerned and the outstanding producers of petroleum. Similarly, the members of the Conservation Board will call upon their technical advisers in the bureaus to contribute to the full discussion of ways and means of safeguarding the national security through conservation of our oil."

III. AMERICAN OIL COMPANIES. c

1. Standard Oil Company.

The Standard Oil is a purely American concern. As a matter of fact, there is no longer today one Standard Oil, but forty companies, all bearing this name followed by that of a town or state.

The Standard Oil of New Jersey

The Standard Oil of Pennsylvania

The Standard Oil of Kansas.

The Standard Oil of Ohio.

The first is the most important. All are federated under one great administrative body.

Its history has something of the marvellous about it. The founder of the Standard Oil was John Rockefeller, a small dealer of oil, who, in 1865, conceived the idea of forming a federation of all the United States, 250 refineries, which waged among themselves a merciless price-war. The Standard Oil Company was created by a combine of refiners, not of producers.

The original Standard Oil, that of Ohio, began humbly with a capital of a million dollars, and the small consumption of 600 barrels a day. In 1867, not only had it brought all the refineries in the neighborhood of Cleveland under its own control, but it had built others at Baltimore, Philadelphia, New York, Boston and Pittsburgh. Its capital had been twice increased, in 1872 and 1874. At the end of the ten years, it transported and distributed 95% of the business output.

In 1881 it amalgamated thirty-nine oil companies. The trust was constituted and already disposed of a capital of Seventy-five million dollars.[7]

The European market was almost completely conquered. Everywhere the Standard operated by means of its subsidiary companies.[8]

The Anglo-American Oil Company in Great Britain

The American Petroleum in Holland

The Dutch Amerikanische Petroleum Gesellschaft in Germany

The Societa Italo-Americana per Petrollo in Italy

The Societe pour la Vente du Petrole in Belgium

The Vacum Oil in Austria-Hungary

The Romana-Americana in Rumania

The Danske Petroleum Altieselskabet in Denmark

The Swenska Petroleum Altiebolage in Sweden

The International Oil in Japan

Twice over, in 1892 and 1911, its constitution was judged illegal, but in vain.

In 1920, the Great Council of the Standard Oil controlled a capital of a thousand million dollars; representing almost equal profits, and a daily consumption of two hundred million barrels, which it even hoped to see presently increased to three hundred millions. Here are the original and the present (1923) positions; they are widely different:-

Capital has increased from 1 to 1,000.

Profits have increased from 1 to 100,000.

Production has increased from 1 to 300,000.

2. Doheny Interests.

Edward L. Doheny and a group of American capitalists had secured the Hacienda del Tulillo in 1900, in Mexico. This is the leading concern in the Mexican oil industry and in 1924, its subsidiary companies, the Huasteca Petroleum Company and the Mexican Petroleum Corporation produced 29,248,961 barrels out of the total Mexican production of 140,699,208 barrels.[9]

3. The Sinclair Oil Company.

Its capital is Five Hundred Million Dollars.

IV. AMERICAN POLICY IN VARIOUS COUNTRIES.

In Asia and Australia.

A. Persia and Mesopotamia.

1. In 1913, the New York Standard Oil got concessions in Palestine from the Turkish Government.

2. An American prospector arrived in Jerusalem, searching oil deposit. However, he was arrested by the British General who was Governor of the town. The protests of President Wilson were made but in vain.

3. The claim for the equal opportunity to Mesopotamian oil fields. (November, 1920).

B. Philippine Islands.

1. In 1919, a State-subsidized company was established by Act I, for oil and exploitation of the islands. The total capital will be 500,000 peso.

2. By Article of Act of the Philippine Legislature of August 31, 1920, participation in the working of all "public lands containing petroleum and other mineral oil and gas", is confined to citizens or corporations of the United States, or of the Philippines.

C. The Claims for the Djambi Oil fields in May, 1921.

In America.

A. Mexico.

1. Relation between the United States and Mexican oil industry.

a. Capital:- Seventy per cent of the total capital in-

vested there is American in origin. Twenty seven per cent is Anglo-Dutch. Only three per cent of the capital invested in this Mexican industry is Mexican. According to oil fields of July 1920, the Mexican petroleum industry represents a value of 300 million Mexican dollars.

b. Exportation to the United States:- Mexico retains only four per cent of her production. In 1920 she exported 150,000,000 barrels[11] out of 155,000,000 produced, keeping for home consumption only 6,000,000 barrels. Seventy eight per cent of her production went to the United States.

c. Companies: At the end of 1918, the number of oil companies in Mexico was 27, distributed as follows:[10]

American	17
Spanish & Mexican	5
Holland (Dutch)	3
English	2
	27

Since March, 1922, the American oil companies have been working out a plan for amalgamation, so as to form a powerful American group. The companies joining the group would be:

The Standard Oil
The Atlantic Refining
The Sinclair
The Texas Company of Mexico
The Mexican Petroleum

2. The foregoing investigations show us how the Mexican oil industry is significant to the United States. The keen attention and protection are always provided by the Government for American capitalists in Mexican oil industry. It is said there is a special arrangement with the United States concerning the Mexican oil fields. They are:

a. American ownership of Mexican oil fields cannot be sold to foreigners except under the United States Government's permission.

b. For enterprise of Mexican oil industry, the special arrangement of loans are provided by banks.

3. Mexican evolutions and oil industry.

a. "The favour that Porfino Diaz was showing to Lord Cowday, who came to Mexico to carry out certain harbour improvements for the American oil interests in Mexico and when, in 1910, Diaz was elected President for the eighth time, it seemed certain that the British interests in the Mexican oil fields would win a decisive advantage over all of their rivals."[d]

b. Francisco Madero had contested the election of 1910 against Diaz; had been "counted out" by the Diaz machine. Madero demanded that Diaz either resign or permit a fair election. Since Diaz would not do either, Madero headed a revolution which had soon spread over the whole northern area of Mexico.

c. The United States oil interests supported Madero, Great Britain oil interests Por~~t~~firio Diaz.[12]

d. Madero had been looked upon as a friend of the United States. After his election in 1911, he had been recognized promptly by the United States.

e. Madero was overthrown in February, 1913, by Felix Diaz, nephew of the ex-President, and Victoriano Huerta, Commander-in Chief of the Federal Army.

"That the Huerta forces have maintained the Diaz policy of antagonism to American oil interests and friendship to Lord Cowdray is apparent."[13]

American oil put Madero in as President of Mexico but British oil interests kept Huerta in power.[14]

f. Within three months of his accession to the presidency, Huerta was face to face with a formidable Constitutional uprising headed by Carranza, Villa and other powerful chieftains. President Wilson supported the cause of the Constitutionalists.

In 1914, the force of Carranza and Villa openly were favoured by the United States.

g. Carranza received active assistance from the American Government and from the United States oil interests in his effort to take the Mexican Government out of the hands of the British-supported Huerta.

4. Nationalization of Oil in Mexico.

a. A constitutional convention met on December 2, 1916, and on February 5, 1917: and the new Constitution was promulgated. From the standpoint of an oil problem, the most important doctrine embodied in this constitution was that the sub-soil rights of Mexico (minerals, fuels, etc.) belonged to the Mexican people. The essential elements in this doctrine are stated in Article 27.

b. On February 19, 1918, Carranza issued a decree imposing a petroleum tax under Article 27.

c. In 1920 a temporary regulation for oil exploitation was made and it will be in power until the law is established.

d. The Carranza Government fell in May, 1920. The new Government, headed by General Obregon, was maintaining the same policy.

President Obregon taxed the oil industry more.

Justice Adolfo Arias was emphatic in declaring that the nationalisation of petroleum deposits under Article 27 of the Constitution must be made retroactive and applicable to lands legally acquired under the mining law as it stood prior to May 1, 1917.

e. Senator Albert B. Fall, in a letter written a few days before he was appointed Secretary of the Interior by President Harding, said: "So long as I have anything to do with the Mexican question, no Government in Mexico will be recognized, with my consent, which Government does not promise to protect American citizens and their property rights in Mexico."[15]

5. The United States Memorandum to the Mexican Government.

George T. Summerlin, Charge d'Affaires of the American Embassy at Mexico City, presented the memorandum to President Obregon on May 27, 1921.

It avoided any reference to the existing controversy but affirmatively guaranteed the rights of American property and American citizens in Mexico.[16]

President Obregon's reply was received in Washington on June 3, 1921 and was not considered entirely satisfactory.

6. On July 7, 1921, in his public statement, Secretary Hughes said:[17]

"The fundamental question which confronted the Government of the United States in considering its relations with Mexico is the safeguarding of property rights against confiscation. Mexico is free to adopt any policy which she pleased with respect to her public lands, but she is not free to destroy without compensation valid titles which have been obtained by

American citizens under Mexican laws."

7. The Mexican Recognition Conference between the United States delegates and the Mexican representatives held its first session on May 14, 1923 in Mexico City.[18]

The Americans had already made it clear to President Obregon that if Mexico is to be recognized, she must respect property rights.

President Obregon and Alberto Pani, Minister of Foreign Affairs, instructed the Mexican delegates that in their negotiation with the Americans, (according to dispatches of May 8, 1923):[19]

First:- Insist on absolute respect for Mexican sovereignty.

Second:- Agree to non-retroactivity, in so far as it affects petroleum rights acquired prior to May 1, 1917, or Article 27 of the present Constitution nationalizing subsoil and mineral products.

Third:- Announce the Administration's support of the new law recently enacted by the Chamber of Deputies.....etc.

8. On August 31, 1923, the United States recognized the Obregon Government at last.[20]

The agreement signed provided that American oil companies' rights to subsoil acquired and exploited prior to the Constitution of May 1, 1917, remain intact; after that date the provisions of the Constitutional prevail.

9. Recent controversy between the United States and Mexican Governments.

a. The Alien Land Bill which is designed to put into operation

Constitution Article 27, finally passed the Chamber of Deputies on November 13, 1925, from the original bill that was introduced on October 1, 1925.[21]

b. The Administration's petroleum bill was passed by the Mexican Congress in December, 1925.[22]

"By the first three articles in this bill all hydrocarbons found in their natural deposit are unconditionally nationalized; the inalimnable and imprescriptible "national dominion over such deposits is conditionally vested in the Federal Executive, and the petroleum industry is defined and is declargd to be a public utility." e

"Article 4 contained the same objectionable features as the alien land bill, since it requires all foreigners, in addition to fulfilling the provisions of the petroleum law "to comply beforehand with what is provided in Article 27.""

"Article 5 forbids the transfer of concessions obtained under the law of foreign Governments or rulers and denies to them the right to be admitted as associates or copartners, or to have any right whatever created in their favor. Article 6 provides for exclusive Federal jurisdiction in everything relating to the petroleum industry."

c. On January 9, 1926, the United States regarded with disfavor the Alien land and petroleum Acts on the grounds that they were inimical to Americans, who own property worth $500,000,000 in Mexico, and that the acts were contrary to the assurances given to the United States Government by the Obregon Government, in 1923.

d. The following day (January 10, 1926) Minister of Foreign Relations, Saenz, vigorously asserted the right of the Mexican people to "pass such legislation as they see fit for an independent nation and to

exercise full right of sovereignty."

e. The controversy between the United States Government and Mexico with respect to the new Mexican Alien land bill and petroleum laws reached a critical stage during February and March.

f. On February 4, American Ambassador Sheffield delivered a second Note of protest from the State Department to the Mexican Government It was unofficially reported from Washington that in the new note the United States Government reiterated its contention that the land and petroleum laws are plainly retroactive and confiscatory and are violative of American treaty rights.

g. President Calles Stated on February 5, 1926 that the Mexican Government "expects fruitful results" from the promised cooperation of the oil companies with the Department of Industry, Commerce and Labor "in studying the regulations of oil law."

h. Controversy between the United States and Mexican Governments is still going on and it is interesting to watch how it will develop in the future.

B. South America, Panama and Costalia.

1. Panama.

The Caclis Oil Company under the American capitalists began the work in 1921.

2. Colombia.

The most powerful enterprisers are Americans. The Colombia Oil Company and the Tropical Oil Company are important among them.

3. Bolivia.

The Standard sent prospectors to Peru, Colombia and Bolivia.

4. Peru.

In 1919, the International Oil Company, the subsidiary of the Standard, showed the greatest oil production among various concerns in that country.

OIL POLICY OF MEXICAN GOVERNMENT:

I. Oil Nationalization.

Article 27, in the Constitution of 1917, is famous because it will always be a controversy between the United States and the Mexican Government. Following is its whole sentence:

Article 27: "In the nation is vested direct ownership of all minerals or substances which in viens, layers, masses, or beds, constitute deposits whose nature is different from the components of the land, such as minerals from which metals and metaloids used for industrial purposes are extracted; beds of precious stones, rock salt and shell lakes formed directly by marine waters, products derived from the decomposition of rocks, when their exploitation requires underground work; phosphates which may be used for fertilizers; solid mineral fuels; petroleum and all hydrocarbons, liquid, solid or gaseous.

Legal capacity to acquire ownership of lands and waters of the nation shall be governed by the following provisions:

1. Only Mexican by birth or naturalization and Mexican companies have the right to acquire ownership in lands, water and their appurtenances, or to obtain concessions to develop mines, water or mineral fuels in the Republic of Mexico. The nation may grant the same right to foreigners, provided they agree before the Department of Foreign affairs to be considered

Mexican in respect to such property, and accordingly not to invoke the protection of their Governments in respect to same, under penalty, in case of breach, of forfeiture to the nation of property so acquired."

2. Establishment of the Petroleum Consulting Committee. This committee was established by the President's order in July, 1920. The Secretary of Commerce and Industry is the Chairman of the Committee, and it is composed of four members of which two are lawyers and the other two, engineers. The Committee exercises the following functions:-

a. Studies of Law and Regulations, concerning the oil industry.

b. Studies for Controversies in oil industry.

c. Survey of the conditions of the oil industry.

d. The encouragement of the oil industry.

e. Study of the fuel question, as the foundation of industrial development.

f. Study for the relation of foreign and home oil industry.

g. Answer to questions, asked by the Department of Industry and Commerce, by the other Departments of the Government and by individuals.

h. Making of the oil industry statistics.

1. Taken from the "Tokyo Asahi." The newspaper didn't give the source from which they quoted.

2. Sir Boverton Redwood: Petroleum, Vol. 1, p. 73.

3. This article summarized or reproduced in the American Press - Philadelphia, Public Ledger, April 9, 1920.

4. This was stated under the British policy already.

5. Taken from the "Tokyo Asahi", August, 1925.

6. Complete record of public hearings by F.O.C.B. Feb. 10, 1926.

7. Struggle for Oil, p. 48. The need for establishing unity of direction was the object "that the Standard Oil Trust was found in 1882. It was the first time that the word 'trust' appeared in the name of a firm."

8. The Struggle for Oil, p. 51.

9. Petroleum Age, March, 1925.

10. From the "Tokyo Asahi", August, 1925.

11. Figures are taken from "The Struggle for Oil". According to the "Petroleum Age", Vol. 15, No. 3, March 1, 1925, her total production in 1924 was 140,[illegible] barrels and in 1923, 151,727,570 barrels.

12. United States Foreign Relations Committee. Revolution in Mexico, 1913, pp. 104-105. Also S. Nearing: Dollar Diplomacy, pp. 88-89.

13. "World Work" Vol. 27, p. 294.

14. Originally it was declared by the London Mail. I quoted it from the "Current Opinion", V. 55, p. 396.

15. "Current History", October, 1921.

16. "Current History", April 1921. "Mexican Recognition Delayed", Vol. 14, p.145.

17. "Current History," July, 1921, Vol. 14. "Mexican Attitude on Property Rights", p. 711.

18. "Current History", July, 1923.

19. "Current History", June, 1923.

20. "Current History", October, 1923.

21. "Current History", December, 1925.

22. "Current History", January, 1926.

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a. Nearing S. and Freeman J., Dollar Diplomacy.

b. From Review of Reviews, Feb. 1925, p.133.

c. This part is practically quoted from De La Tramerye, The World Struggles For Oil, pp.45-59.

d. Nearing S. and Freeman J., Dollar Diplomacy.

e. "Mexico, in A Month's World History." Current History, Jan., 1926.

CHAPTER VII.

FRANCE*

I. THE CARTEL OF TEN.

After 1870, there was no free competition in petroleum industry in France. The industry fell into the hands of the great firms which, sheltered behind the customs barriers established by the National Assembly at Versailles immediately after the Commune, formed a cartel enjoying a veritable monopoly, and apportioning the different regions of France. These ten firms did not compete.

In the original cartel of 1885 there were only three members; around these the other existing refineries grouped themselves in 1893. Thus the Cartel of Ten was formed:-

Fenaille et Desteaux.
Dismarais freres,
Fils de A. Deutsch,
Compagnie Industrelle de Petroles,
Raffinerie du Midi.
Societe Lille-Bonnieres et Colombes (L.B.C.)
Paix et Cie.
C. Lesieur et ses fils.
Compagnie Generale des Petroles.
Raffinerie de Petrole du Nord.

II. FRENCH PRE-WAR CONDITIONS IN THE OIL INDUSTRY.[1]

1. The French had only 400 tank wagons,54 ill organized depots, and 17 refineries.

2. The process of refining in France has never employed more than 300 to 400 men, of whom just over a third were specialists.[2]

3. The fleet of tankers in 1914 comprised only 14 small boats of 3,000 to 6,000 tons, of which only three sailed under the French flag. The others were under the British flag "in order to profit by the less burdensome shipping regulations."

III. PRE-WAR OIL POLICY.

1. July 8, 1871, the French Government protected the Cartel of Ten by the ridiculously high custom tariff.

2. The law of 1893 lowered the import duty from 20 francs to 9 francs a metric quintal for crude oil, and from 32 francs to 13.50 francs for refined oil.

3. About 1904, the understanding with the Standard Oil was changed to a close dependence; the Ten became nothing more than Rockefeller's representatives in France, his oil importers. The Standard fixed the quantities to be sold by each one and made them sign an agreement to sell at the prices fixed by it at the beginning of each week.

4. Thus, the Standard was dominant in France up to the War, fixing prices and eliminating other importers. But, in spite of the lowering of the customs duties in 1893, they still remained so high that the Conseil Superieur de Navigation Maritime, at its meeting of May 15, 1913, complained of the difficulties of procuring petroleum in France at reasonable terms.

IV. OIL CONDITIONS IN FRANCE DURING THE WAR.

1. At the beginning of the War, the French State possessed no reserves of petrol or petroleum. The refineries disposed of a stock amounting at the end of July, 1914, according to the Customs statistics, to

406,200 quintales of crude oil,
433,560 " " refined oil,
342,090 " " petrol.

2. At the time of the first battle of the Marne, France had 22 squadrons of 6 aeroplanes (132), with engines of 80 or 100 H.P.; 110 motor lorries and 50 tractors. The consumption was then unimportant.

3. At the time of the battle of Champagne, France had 4,000 aeroplanes and 8,500 motor lorries; that compelled her to increase her reserves of oil from 22,000 to 40,000 tons. But the crisis as regards supplies began in April, 1916.

4. The position grew steadily worse and reached its culminating point after the United States came into the War in November, 1917.

5. On December 5, 1917, the Cartel of Ten had to confess its importance and resign to the State a task which was too much for its powers.

6. On December 15, 1917, President M. Clemenceau wrote a note to President Wilson:-

"The minimum stock of petrol computed for the French armies by their Commander in Chief must be 44,000 tons and the monthly consumption is 30,000 tons. This indispensable stock has fallen today to 28,000 tons, and threatens to fall to almost nothing if immediate and exceptional measures are not undertaken and carried out by the United States.

".....the essential condition being that President Wilson shall obtain permanently from American oil companies tank steamers with a supplementary tonnage of 100,000 tons.

"These tank steamers exist.

"President Clemenceau personally requests President Wilson to give the necessary Government authority for the immediate dispatch to French ports of these steamers."

7. France consumed:

Year	tons	tons
Peace		
1914 (first half year)	200,000	476,000
War		
(second half year)	276,000	
1915		457,000
1916		640,000
1917		810,000
1918		1,000,000

87½ per cent of this oil was supplied by the American Continent.
12½ per cent ....only, by the Old World.

8. The System of the Consortium, which was urged by the United States Government, was embodied in the inter-allied agreements made in Paris and London in November, 1916 and December, 1917.

V. AFTER THE WAR.

1. France, in compensation for the great damage she had suffered during the war, was to receive important rights for the development of concessions in Galicia, Rumania, and Turkey.

2. On January 21, 1919, although the War was over, the mandate of the Petrol Commission was extended for another six months.

3. On January 30, 1919, M. Clemenceau granted diplomatic powers to M. Henry Berenger. He immediately sent commissions of inquiry into every country in which France might have petroleum interests to London, Warsaw, Bukarest, Constantinople, Baku, and Mesopotamia.

4. On March 7, 1919, the Walter Long-Berenger agreement was signed with Great Britain, fixing the broad outlines of a common oil policy in Mesopotamia, Rumania, and eventually in Galicia and Russia.

5. With the corporation of the Royal-Dutch and the French Government there was created the Societe pour l'Exploitation des Petrole in July, and the Societe Maritime des Petroles in August, 1919; the former with a capital of 20 million francs, and the latter of 10 million francs.

The Royal Dutch offered to supply France by priority, in time of peace as in time of war.

6. In spite of its promises, the Royal Dutch did not succeed in delivering sufficient quantities of oil. By March 13, 1920, the reserves had fallen below the danger line, to less than 75,000 tons.

7. A few days after the San Remo Agreement had been signed, the French Government resumed control of oil and M. Laurent Eynac, the new Commissioner hastened to annul the licenses to import, granted to the Standard.

8. By the San Remo Agreement, (April 24, 1924) "the British Government undertook to grant to the French Government 25 per cent of the net output", in Mesopotamia.

VI. OTHER POLICY.

1. An ordinance for the control of oil (Sept., 1919.)[3]

a. An importer of oil and oil products is required to

report the amount of importation and also its arrival to French ports to the Importation Committee.

b. The Committee orders the price.

2. The new oil regulation.[4]

a. Oil importer must get the Government's permission.

b. The amount of "reserve" should be reported monthly.

....

References:

1."World Struggle for Oil", pp. 202-206

2. De la Tramerye quoted this from "Le Page, L!Imperialism du Petrole".

3. From the "Tokyo Asahi", August, 1925.

4. From the "Tokyo Asahi", August, 1925.

General References:

The same as for "Great Britain" and the "United States".

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* Practically quoted from De La Tramerye, The World Struggles For Oil, pp.201-243.

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CHAPTER VIII.

JAPAN'S OIL POLICY.

Petroleum veins are principally founded in Tertiary terrains and according to geologists, the oil-bearing veins extended from Formosa to Saghalien. In practice the districts bordering on the Japan Sea especially Niigata and Akita are the oil fields of Japan.

A research was made by Mr. Arthur H. Redfield to determine Japan's oil reserves. According to him the result is as follows:[a]

"Of the basic minerals of modern industry, Japan has coal, copper, tungsten, pyrite, and phosphates..... She lacks chiefly iron and petroleum in sufficient quantity for her requirements...... The need for petroleum has become apparent since 1916, when the production of crude oil in Japan reached its peak, only to decline. From the Japanese standpoint it is highly unfortunate that Japan's shortage of petroleum should be made manifest just at that period of the world's history when the competition for petroleum, both mined and unmined, is keenest..... This period of the world's history may be called the Age of Petroleum."

"Japan stands fourth among the countries of the Orient in production. Both the Dutch East Indies and Persia export annually several million barrels of crude and refined oil, while Japan must import a considerable quantity. Even the crude oil that is produced is not of a sufficiently high quality for all purposes."

"J. Morgan Clements, trade commissioner of the Bureau of Foreign and Domestic Commerce, published a very favorable estimate of Japanese

petroleum reserves from "proved", "provable", and "possible" ground. He is more sanguine than the Japanese themselves, believing the oil will continue to be obtained from "proved" areas almost indefinitely, although not in increased amounts. He prophesies a total production of from 390,000,000 to 1,090,000,000 barrels if every effort is made. Up to the present time, only about 49,000,000 barrels have been produced."

The consumption of petroleum in Japan by private users is estimated in the neighborhood of 15,600,000 tons per annum. The total must reach some 30,000,000 tons if the consumption by the Navy is taken into account. Against this the home supply in 1921 amounted to 9,096,000 tons or about 60 per cent of the private consumption. The shortage comes from California, Java, Borneo and Mexico.

The shortage of home supply has obliged Japan to import a large quantity of foreign oil than in former times because of the declining yield from the existing wells unless new rich veins are discovered. At one time the Standard Oil Company of America took part in competition with the native companies to exploit the oil fields of Echigo, but since the discontinuation of this enterprise in 1907, the Standard Oil has chiefly confined its operation to supply refined oil just as its foreign rival, the Rising Sun has been doing. In 1916 when the capital invested in the oil industry amounted to $28,500,000, 432,000 tons of crude oil was produced. In 1921 the investment increased to $34,164,000, but the output declined to 325,000 tons. Nor has Japan discovered oil fields in Korea or Manchuria. Unless she secures a new source of oil supply not too far from her own confines, she can hardly hope to place her industry, as well as her national defense, upon a sound basis.

"This serious state of affairs has led the Japanese Government to conduct an investigation of all unexplored oil areas; to investigate economic utilization of fuels; to increase import duties on petroleum products; to investigate oil production, and to further creation of fuel substitutes; to obtain foreign oil fields; and to increase the importation of crude oil."[b]

"Japan may only hope to obtain new supplies of crude oil outside Japanese territory, in Russian Saghlin, and in Manchuria. In the former, oil production is not as yet on a commercial basis; in the latter preparations are being made to distill abundant and accessible beds of moderately rich oil shale.

A skeptical and worried Government, however, is making every effort to find and obtain control of new oil fields. Investigation and development in Chosen (Korea), Taiwan (Formosa), and Karafuto (Japanese Saghalin), has been in the main unsatisfactory. Of all the fields outside Japan, proper, in which Japan has looked for oil, as has been said before, northern Saghalin for crude oil and Manchuria for oil shale seem most promising and practicable."[c]

OIL POLICY, CARRIED OUT.

1. Close Door Policy--The Mining Law.

Article 5 of the Japan mining law promulgated in 1905 reads as follows:

"No person other than subjects of the Empire, or juridical persons duly formed in accordance with the laws thereof, are entitled to acquire mining rights."

Commenting on this law, the United States Department of State Report to the House of Representatives says:[d]

"The meaning of 'juridical persons' in the Japanese law is such

that it is believed to be practically impossible for foreign countries to retain or transfer undisputed possession of mining rights in Japan."

II. THE NAVY FUEL DEPARTMENT.

"The growing demand of the Navy, shipping, trade, etc., for heavy oil arroused in Japan as in some countries in the West, serious discussion of both the Government and general public oh the question of fuel supply. The Navy gets the bulk of heavy oil imported from Borneo and California and has undertaken the refining of it to the amount of 100,000 tons which will be increased to 200,000 tons in the near future. The Navy Fuel Department was created in 1921 to investigate the nature, preparation and utilization of fuel of all kinds."[e]

III. JAPAN'S TREATY WITH RUSSIA.[f]

1. The agreement is the result of four years' labor, four conferences having been held in that period.

The first, which proved abortive, met at Dairen, Manchuria, in 1921. The following year saw another fruitless conference, this time at Changchun, Manchuria. The third was held at Tokyo in 1923. The fourth, which resulted in the new agreement, began its labor in May, 1924, and came to a successful end on January, 1925, in Peking.

2. Since the conclusion of the Russo-Japanese treaty on January 20, 1925, many speculations and allegations have been advanced, especially in European capitals, as to its aims and purposes.

3. To understand Japan's motives in this respect, a few outstanding facts must be kept in mind.

a. In Manchutia and Eastern Siberia there are more than a

million Koreans among whom "Red" agents have been actively engaged in seditious propaganda, which Japan believes can be stopped only by dealing openly with Russia.

b. The Russian Far East, especially Russian Saghalin, offers to Japan the only promising source of oil supply, in which she is woefully dificient.

c. The Japanese, a great fish-eating people, must get a major portion of their fish supply from Russian waters.

d. The Japanese immigration, barred out of all other sparsely settled lands, must find an outlet in Eastern Siberia.

e. The question of Russian financial obligations is not so important to Japan as it is to France, Great Britain, or America.

4. Saghalin oil is the most important factor in the agreement, a protocol of nine articles being devoted entirely to this matter. Japan has for years been seeking oil reserves in vain. Her home production of oil, now amounting to only 30 per cent of her consumption, has been steadily decreasing.

5. A Japanese firm, Kokuichin, under an agreement with a private Russian firm, has during the last year or two been engaged in prospecting and drilling wells in a certain section of eastern Saghalin of Russia. Half of this section has, by the new agreement, been formally granted to the Japanese firm.

6. In addition, the agreement confers upon Japan a prospecting right over 1,000 square verts, or 280,000 acres, on the eastern coast, on condition that -- when prospecting proves fruitful -- only 50 per cent of the productive area will be granted to Japanese concessionaries for exploitation.

7. Of the oil produced in these fields, Russia is to receive 10 to 15 per cent and where gushers are found, 45 per cent.

8. All concessions will be restricted to periods forty five years from November 30, 1925.

9. Russia has no preference rights for buying oil products.

10. Thus, the Soviet Government will not only save itself the cost of prospecting and drilling wells for experiment, but will also have a substantial share in the output of the fields to be operated by Japanese enterprisers.

IV. THE SHALE OIL DISTILLATION.

1. In the Fushun coal fields of Manchuria, there is a bed of oil shale 2500 to 4000 feet thick. The reserves are estimated at 1,100,000 barrels, altogether. In the form of oil shale, it is estimated at 5,500,000,000 tons. Japan should be able to obtain 6,000,000 barrels a year for 300 years, although the shale is not particularly rich. The deposit is easily workable: there is an abundance of cheap labor, and Japan has inclusive concessions.

2. The South Manchurian Railroad Company is granted by the Finance Department to issue bonds, amounting to 5,400,000 yen in 1926, for oil shale industry.

3. The South Manchurian Railroad Company is planning to buy the oil shale producing machine from Scotland and to begin an actual production in 1927.

4. According to the Tokyo Asahi, annual production is estimated 3,500, tons of oil shale.

5. The Navy Department has promised to buy all of this.

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c. "The Petroleum Supply of Japan." Review of Reviews, Jan., 1926.

d. 66th Congress 2nd Session, House of Representatives, Document No. 8OI, p.25.

e. Japan Year Book, I924- 25 on "Mines and Mining".

f. Practically from K. K. Kawakami's.
K. K. Kawakami, Japan's Treaty With Russia. Current History, April, I925.

CHAPTER IX.

CONCLUSION.

The foregoing investigation leads us to several conclusions:

1. Oil, as an international problem, at present, is nothing but the product of new technological inventions. We do not know when the other new era will come. But as long as the present condition is prevailing, we will have struggles for oil, as in other raw materials. There is no reason, however, that a new invention or discovery which decreases the importance of oil in the industry is not possible.

2. "If we compare the theories of the mercantilist period with those of the present day, it will be clear that the old doctrines are no longer held in their crudest form."[a] "Nevertheless they remain as vague assumptions and still influence the whole atmosphere of international politics."[b] The idea of national interests remains -- the great and worst survival of mercantilism. "In speaking of national interests"[c] here we confine the phrase to economic interests. "This use of the term agrees with the conception of national interests that is commonly held. For, it is generally believed that a powerful Government helps to enrich the subject, that conquest brings a reward of wealth to the successful nation, that an extension of territory is beneficial to the people -- in short, that an increase of power means an increase of prosperity."[d] The struggle of nations for oil is based upon this idea of national interests just as the struggle for colonies was in the past.

3. In our present world, the peoples more and more are dependent upon each other. The international economic life is now needed. However, "the national sentiment has fostered political independance and tended to make each nation endeavor to fit itself to live an independent life."[e] We observe the slow progress in men's minds in the struggles for oil, which we have just studied.

4. The general policies of nations are, more or less, similar and can be concluded under the following three heads:

a. "Closed door" policy to their own and influenced territories.

b. Claim of "Open door" policy toward other nations.

c. Aggressive policy towards weak countries and non-occupied territories.

5. Two great Anglo-Saxon nations, Great Britain and the United States of America, are playing the main parts in the fields of oil struggle.

Ten years ago, Britain had no oil, today she is independent, tomorrow she will be mistress.

Up to this time, the United States produced 70 per cent of the total of the world's oil, but her future is rather gloomy, mainly due to two reasons:

a. Enormous increase of home consumption.

b. Exhaustion of resources.

Two nations fought for oil openly or through its trusts in various parts of the globe, namely:

a. In the owned territory of the U.S.A.

b. In Mexico.

c. In South America.

d. In Mesopotamia

e. In the French market.

6. Other nations also are anxious to establish their own oil policies. But they discovered to their sadness that the world was already under the control of Great Britain and the United States of America. They were awakened too late or they were too weak to carry out their own plans.

* * *

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a. Gill, Conrad, *National Power and Prosperity*. p.II6.

b. Gill, Conrad, *National Power and Prosperity*. p.II6.

c. Gill, Conrad, *National Power and Prosperity*. p.7.

d. Gill, Conrad, *National Power and Prosperity*. pp. 7-8.

e. Villiate, A., *Economic Imperialism*. Chapter 4.

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Delaisi, F., Oil, Its Influences On Politics.

Although this is rather small and brief, probably the first one in which the world struggles in the present manner for oil were fully discussed. The author stooped his writting at the close of the San Remo Agreement.

De La Tramerye, The World Struggles For Oil.

In this volume, the author endeavoured to descrive further development of the oil problem. But he took many materials from Delaisi's. I saw the same sentences in both: for instance, "Ten years ago, Britain possessed no oil, today she is independent, tomorrow she will be mistress." Since the Delaisi's was written two years before than De La Tramerye's, naturally De La Tramerye endebted those to the Delaisi's.

Pogue, J.E., The Economics of Petroleum.

This volume dealt with technical side of oil industry. But I endebted to this not a less especially for Chapter II of mine.

Eckel, E. C., Coal Iron and War.

Only the Chapter X of this volume can be avaiable for the direct use in this topic. But the whole volume gave me very good knowlege especially to make my Chapter IV, Why the Struggle For Oil. According to the author, the introduction of the Thomas process (in iron industry) gave a great significance to relative position in the industry of Great Britain, German and France at that time; and the same thing can be seen in improvement and development of aircrafts, internal combustion engines and of boiler. I got an idea, "Oil, as an international problem, at present, is nothing but the product of new technological inventions," in this book.

Talbot, F. A., The Oil Conquest of the World.

The treatment the problem in this book is technological side only. Moreover, it is out of date, already.

Parson, F. W., Petroleum and Prosperity.

Small pamphlet. This is rather for popular readers and no scientific investigations were given.

Nearing S. and Freeman, J., Dollar Diplomacy.

I endebted to this volume especially in the U.S.A.'s policy toward Mexico. Very good. The book teams with first hand information and facts, well annotated with foot-notes, never before assembled so systematically within so small space.

Culbertson, W. S., International Economics.

Chapter 9, Raw Materials and Fuels. The central thoughts of this book is internationalism. In Chapter 9, the author gives only brief descriptions to the oil problem.

Villiate, A., Economic Imperialism.

Although this gave no specific materials to this problem, I endebted in thoughts. Its influence can be seen in my conclusion, 3.

Haldane, J. B. S., Daedalus.

The author is a young scientist of England. This was written not for scientific purpose but rather amateur. There were, however, full of suggentions for further improvements, inventions and progress in science. Hence, I wrote in my conclusion that "There is no reason, however, that a new invention or discovery which decreases the importance of oil in the industry is not possible."

Japanese Foreign Office,
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Very good summary. But they were written from secondary sources and out of date a little.

66th Congress, 2nd Session, House of Representative.
Document No. 801. Advance in the Price of Petroleum Products.

Although it was written on the secondary source, I feel rather it is reliable.

London Times.

This newspaper is rather reliable than others.

Tokyo Asahi (Japanese newspaper).

I couldn't give much credits to it.

Tokyo Jiji, Japan Year Book, 1924-25.

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